

WINSLOW, J.B Sir William Grace, Bar,

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UNCERTAINTY

OFTHE

SIGNS of DEATH,

And the DANGER of
Precipitate Interments and Diffections,
Demonstrated,

I. From the known Laws of the Animal Œconomy.

II. From the Structure of the Parts of the Human Body.

AND

III. From a great Variety of amusing and well-attested Instances of Persons who have returned to Life in their Cossins, in their Graves, under the Hands of the Surgeons, and after they had remained apparently dead for a considerable Time in the Water.

WITH

Proper DIRECTIONS, both for preventing such Accidents, and repairing the Missortunes brought upon the Constitution by them.

To the Whole is added,

A Curious and Entertaining ACCOUNT of the Funeral Solemnities of many Ancient and Modern Nations, exhibiting the Precautions they made use of to ascertain the Certainty of Death.

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UNCERTAINTY

OF THE

SIGNS Of DEATH, &c.

SECT. I.

HO' Death, at some Time or other, is the necessary and unavoidable Portion of Human Nature in its present Condition, yet it is not always certain, that Persons taken for dead are really and irretrievably deprived of Life; fince it is evident from Experience, that many apparently dead, have afterwards proved themselves alive by rising from their Shrowds. their Coffins, and even from their Graves: It is equally certain, that some Persons, too soon interred after their supposed Decease, have in their Graves fallen Victims to a Death which might otherwise have been prevented, but which they then find more cruel than that procured by the Rope or the Rack. Incontestable Facts evince, that fome Subjects, too rashly laid open, have upon feeling the Smart of the dissecting Instruments, by their mournful Shrieks and Cries, discovered their too certain Marks of Life, and by that lamentable Circumstance exposed the unwary Operator to eternal Infamy, and the implacable Indignation

of the furviving Friends.

(1.) Some may possibly look upon such Relations as fabulous and chimerical, and imagine it a Piece of Credulity below the Dignity of human Reason to believe, that Johannes Duns Scotus bit his own Hands in his Grave, or that the Emperor Zeno exercifed the like Piece of distracted Cruelty on himself after reiterated Groans, distinctly heard by those who watched him. But tho' we should grant, that Narratives of Accidents which happened fo long ago, are purely spurious, yet furely we must yield a ready Affent to the Testimonies of Persons, whose Candour and Veracity we have no Reason to suspect; who only speak of things they have feen, and some of whom are not only still alive, but also capable of giving distinct Accounts of what has happened before their own Eyes.

Thus the learned Lancisi, first Physician to Pope Clement XI. in his Treatise De Morte Subit. Lib. I. Cap. xv. N. 2. speaks in the following Manner: "Histories and Relations are not the only Proofs which convince

convince me, that many Persons, suppofed to be dead, have shewn themselves alive, even when they were ready to be buried, fince I am induced to fuch a Belief from what I myself have seen; for I faw a Person of Distinction, now alive, recover Senfation and Motion, when the Priest was performing the funeral Service over him in the Church: A Circumstance which struck the By-standers with a Degree of Terror superior to their Surprize." Peter Zacchias, a celebrated Physician of Rome, in his Q. Med. Leg. T. iii. Conf. 70. N. 2. informs us, that, "In the Hospital which takes its Name from the Holy Ghost, a young Man being feized with the Plague, by the Vio-" lence of the Disease fell into so perfect a "Syncope, that he was accounted dead, and confequently had his Body laid among those, who having died of the fame Disorder, were to be interred with 66 the utmost Expedition; but in the Boat 66 in which these Carcasses were carried over 66 the Tyber to the destined Place of Interment, the young Man discovered some 66 Signs of Life, and was for that Reason 66 conveyed back to the Hospital, where he 66 perfectly recovered Life; but two Days 66 after falling into a like Syncope, he was " judged irreparably dead, fo that his Body was without any farther Hesitation laid B 2 " among

" among those destined for the Grave; notwithstanding which, he once more re-

"turned to Life, and having particular Care taken of him, was by the Use of

proper Remedies so perfectly cured of his Disease, that he is now alive." To which the Author adds: "I know that in

Rome, during this Plague, several Perfons were buried for dead, tho' they were

" really alive."

Philip Peu, a successful Surgeon and Man-Midwife in Paris, with a Degree of Candour no less uncommon than laudable, in his Prax. Obstetr. II. C. ii. § 2. relates an unlucky Accident which happened in his own Hands; for being warmly folicited to perform the Cesarian Section on a pregnant Woman, whom he thought perfectly dead, because he perceived no Pulsation in the Sides of the Breast, and because a Mirror applied to her Mouth was not tarnished by her Breath, he did not hesitate to begin the Operation; but he had hardly plunged the Point of his Instrument into the Integuments, when the Trepidation or Trembling of the Patient's Body, the Grinding of her Teeth, and the Motion of her Legs, convinced him, tho' too late, of his Rashness. This Blunder filled his Mind with fuch Terror, that he bound himself by an Oath, never for the future to attempt the same Operation, till he was thoroughly satisfied with

with respect to the Death of the pregnant Woman. The like Misfortune is faid to have lately happened to a Surgeon ordered to lay open the Body of a certain Man of Quality before twenty four Hours, after his supposed Death, were expired. And it is fufficiently known to what Hardships and Inconveniencies the like Accident exposed Vesalius, (2.) the greatest Anatomist of the Age in which he lived. But if these wellvouched Histories, consecrated to Immortality, and faithfully handed down to latest Generations in the justly celebrated Productions of their respective Authors, should be difregarded, we can produce living Witnesses to attest Facts of the same Nature: But omitting many of this Kind, we shall only mention those to whose Vouchers the Curious or Incredulous may still have Recourse for Satisfaction.

The first Evidence we shall then produce is Father Le Clerc, formerly Principal of the College of Lewis the Great, and a Manuniversally esteemed for Probity and Candour: This Gentleman will inform any Person, who has a Mind to apply to him, that the Sister of his Father's first Wife being interred with a Ring on her Finger in the publick Church-Yard of Orleans, next Night a Domestick, induced by the Hopes of Gain, uncovered and opened the Cossin, but finding that he could not pull the Ring

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off the Finger, began to cut the latter; the violent Agitation produced in the Nerves by the Wound, rouzed the Woman, whose hideous Shrieks, extorted by the Pain, not only struck Terror into the sacrilegious Robber, but also put him to Flight without his intended Booty; the Woman in the mean time disengaged herself, as well as possible, from her Shroud, returned home, and lived with her Husband ten Years, during which Time she furnished him with an Heir and Representative of his

Family.

Mr. Joseph Mareschal, Chaplain of the Metropolitan Church of Paris, Prior of St. John's de la Motte au Mans, and a Man whose Probity and Attachment to Truth are genuine Ornaments to the facred Character he bears, attests, that about the Year 1714, when passing through the Street of Jean Robert, he saw a Woman wrapt up in a Woollen Covering, and fitting in an Arm-Chair at the Door of an House, hard by the Coffin in which she had been conveyed thither, and from which she had been but just before released. The same Gentleman declares, that in the Year 1722 or 1723, he faw certain Persons meet the publick Bearers, who were coming into the Street called Champ Fleury, in order to convey a Corpse to the Place of Interment, and heard the former tell the latter, that they might return,

fince

fince the Person whom they believed to be dead, was alive, and but lately released from his Coffin.

Mr. Benard, a skilful Surgeon of Paris, certifies, that in the Parish of Riol he himfelf, when a young Man, together with his Father and several other By-standers, saw a Monk of the Order of St. Francis, who had been buried three or four Days, taken from his Grave, breathing and alive, with his Arms lacerated near the Swathes employed in fecuring them; but he died immediately after his too late Releasement (3.) This Gentleman also afferts, that a faithful Narrative of so memorable an Accident was drawn up by publick Authority, and that the raising of the Body was occasioned by a Letter wrote from one of the Monk's Friends, in which it was affirmed, that he was subject to Paroxysms of the Catalepsy.

Mrs. Landry, a Gentlewoman of uncontested Veracity, and Widow of a late skilful Engraver of the same Name, certifies, that her Father was for some Hours laid out as dead, and that by conveying some Salt-Water into his Mouth, at the Instigation of a Gentlewoman who was his Friend, and resolutely affirmed that he was not dead, he recovered, and was not only cured of that Indisposition, but also lived a long Time after it.

The Facts already related feem sufficient to confirm the Words of the celebrated Lancist, when he tells us, "That in the " Time of the Plague Things are trans-" acted with fuch Diforder and Precipita-"tion, that little Care is taken to distin-" guish those who are really dead, from "fuch as only appear to be deprived of Life." May we not therefore justly sufpect, or rather, have we not good Reason to believe, that the like unlucky Accidents happen during the Times of violent epidemical Diforders, in which vast Numbers of Persons, who have been too soon interr'd, probably call aloud from their Graves for a due Vengeance on those, who have barbarously exposed them to a violent Death, which a little Patience might have prevented. The same Horror, Murder, and Destruction, no doubt, attend the precipitate and tumultuous Interments after Battles and Sieges; where Persons only half-dead, or possessed of perfect Life, are promiscuously thrown into Ditches with such as are really and irretrievably dead.

SECT. II.

HE elegant and judicious Celsus, in Lib. II. Cap. v. informs us, that the justly celebrated Philosopher Democritus was of Opinion, that the Signs of Death were not

not sufficiently certain (4). In Apoplexies, in Syncopes, and in Suffocations, whether true, such as those of Persons hanged, strangled, drowned, shut up in too confined Places, or suddenly cut off by pernicious Vapours and Exhalations; or of the spurious Kind, fuch as those of hysteric Women, hypocondriac Patients, and Persons racked by violent Passions of the Mind, or feized with Diforders of an analogous Nature, we are often deceived with respect to the Signs of Death: But this Missortune is less owing to the Impersection of Medicine, than to the Ignorance or Negligence of Physicians, and the Carelessness, Poverty, or perhaps fometimes the wicked Disposition of those who have the Care and Management of the Sick. The Redness of the Face, the Heat of the Body, and the Softness of the flexible Parts, are precarious and uncertain Marks of a remaining Principle of Life; and on the contrary, the Paleness of the Complexion, the Coldness of the Body, the Rigidity of the Extremities, and the Abolition of the external Senses, are very dubious and fallacious Signs of a certain Death. The Pulsation of the Arteries and Respiration are infallible Signs of . Life, because without the two first the last cannot subsist: But we are by no Means to imagine, that these two Motions are totally extinguished, when they become invisible to

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the Eye, or imperceptible to the Touch. If we continue to investigate these Motions for fome Time, we may perhaps discover the Pulse, which was imperceptible in the Wrist when straight or reclined, by gently bending it forward; since in the last Situation the relaxed Artery affords a free Passage to the Blood, tho' conveyed to it with a very inconfiderable Force; whereas the Tenfion of the Artery in the two first Situations entirely stops the progressive Motion of the vital Fluid. If we do not perceive the Pulsation of the deep-seated Artery near the Base of the Radius*, we may perhaps discover it between the Thumb and the adjacent Bone of the Metacarpus +; but we are to guard against a too strong Compression of the languid Artery in this Part, lest we should by that Circumstance occasion a Defect of the Pulse; nor are we inadvertently to take the Pullation of the arterial Extremities in the Points

* The Radius is one of the two Bones of the Fore-Arm, which in the most ordinary Situation of that Part constitutes its superior Portion; it in a particular Manner possesses that Place, when the Pulse is felt.

Bones, which compose the Palm of the Hand. Under the Skin, between the Thumb and that Bone of the Metacarpus which sustains the Fore-Finger, is lodged an arterial Ramissication so considerable, that its Pulsation is not only perceptible to the Touch, but also visible to the Eye.

Points of the Fingers, for that of the Artery we feel, fince by fuch a Mistake we may be induced to believe the Person alive, after he is really dead (5). But tho' all these Scrutinies should prove unsatisfactory, we are not for that Reason to be totally discouraged. From the Pulse of the Arm we must proceed to that of the Temples, and if this should escape us, we must have Recourse to the Carotid Arteries, Vessels not only of larger Diameters than the others, but also more directly exposed to the Action of the Blood propelled from the Heart: But these Arteries must not, like the others, be gently felt, since before we can obtain due Satisfaction, we must plunge the Fingers pretty deep, under the posterior Margin of one of the Muscles called the Sterno-Mastoidei *. A skilful Hand can easily trace the Crural Arteries, near the Groins, in order to discover the State of the Circulation. Besides these different Scrutinies we may also find Signs of Life in the Parts adjacent to the Heart :

* The Muscles called Sterno-Mastoidæi are two Muscles, whose inserior Parts adhere to the Sternum, a longitudinal Bone, dividing the Fore Part of the Thorax into two equal Parts; but the superior Parts of the Muscles are fixed to an Eminence of one of the Bones, which constitute the Base of the Cranium, and this Eminence may be felt under the posterior Part of the Ear: These are two of the Muscles which serve to turn the Head on the Neck.

Heart; for this Purpose the Body must not be laid on its Back, but almost entirely on one or other of the Sides; for when the Body is laid on its Back, every one must be sensible, that the Heart, as it were, subsides towards the Spine, and is so removed from the Præcordia, that its Apex acts very gently, and sometimes not at all on them. Tho' the Apex of the Heart is generally directed to the Lest Side, yet there have been Persons in whom its Pulsation was persentible in the Picht and upon laying open ceptible in the Right; and upon laying open such Subjects after Death, an entirely preternatural Disposition has been found, not only with respect to the Situation of the Heart, but also of all the Thoracic and Abdominal Viscera; and perhaps this preternatural and uncommon Disposition of the Parts has fometimes misguided Physicians in treating Diforders of the Liver, of the Spleen, of the Colon, and especially of the Cæcum or Head of the Colon. Whatever Care and Circumspection we use in making the Scrutinies hitherto specified, yet the Pulsation of the Heart and Arteries is sometimes so infensible (6), that we are very subject to be deceived, and believe the Person dead, who has few Signs of Life, if we do not satisfy ourselves with respect to his State and Condition by other Signs. Respiration affords Marks no less precarious than those of the Pulse; since it is sometimes so languid, and

as it were over-powered, that neither the Eye nor the Hand can discover the slightest Motion of the Breast; for as very faint Vibrations of the Heart and Arteries, together with the free, tho' insensible Entry of the external Air into all the Ramifications of the Bronchia, are fufficient to prolong Life for some Time, even tho' there be no fensible Motion or Pulsation of the exterior Arteries; fo there is almost nothing requifite to supply the Place of a manifest and sensible Respiration, but the elastic Force of the Bronchia and Pulmonary Vesicles asfisted by slight Oscillations of the Heart and Pulmonary Artery (7). But tho' we are furnished with no more certain and infallible Methods, than those already specified, of acquiring a fatisfactory Knowledge of the State of the Organs subservient to the Circulation of the Blood, yet this Misfortune does not supercede or cancel our Obligation to examine the Respiration, and the Instruments of Motion and Sensation; since by fuch a Neglect we may possibly pronounce the Person dead, who is alive, and by such a fatal Blunder deprive him at once of a present Recovery and subsequent Life.

SECT. III.

IFFERENT Authors have propofed different Methods of diftinguishing fuch as are really dead, from those whose Death is still uncertain. Thus, in order to render a languid and over powered Respiration sensible, some, with a steady Hand, apply the Flame of a Wax-Candle to the Mouth and Nostrils, imagining that the tremulous Motion of the Flame from one Side to another, when not produced by some other Cause, is a Proof that Life is not as yet destroyed; whereas they form the contrary Judgment, when the Direction and Situation of the Flame are continually the same. Others pretend to ascertain the Reality of Life or Death by applying to the Mouth or Nostrils a little fine Wool or Cotton. But these Methods are as fallacious as they are common; fince Persons not only alive, but also blessed with perfect Health, may by checking their Respiration, frustrate the Ends of such precarious Scrutinies: Of this any one may be convinced, by making the Experiment on himself. Some foolishly imagine, that when a Mirrour applied to the Mouth and Nostrils is tarnished, it affords a Proof of a still subsisting Respiration; but this Method is attended with no smaller Degree of Uncertainty than the others; fince almost similar Vapours are discharged from the Mouth and Nostrils of a really dead Person, who is as yet warm. Others laying the Body on its Back in fuch a Manner, as to fecure it most effectually from Motion,

put a Glass full of Water upon the Xiphoide Apophysis or Epiphysis*, imagining, that when they perceive Motion in the Water, Life is not as yet ended; whereas they take a perfect State of Rest in the Liquor to be a Proof of certain Death: But in order to give this Method of Scrutiny all the Advantage and Certainty of which it is suf-ceptible, the Body ought not to be placed entirely on the Spine of the Back, but turned in such a Manner to one of the Sides, as that the Extremity of the Cartilage of the ante-penult Rib may be elevated as much as possible, and have the Vessel containing the Water placed upon it; since it is much better disposed to render the slightest Motion of the Breast senfible, than the Xiphoid or Ensiform Cartilage. But it is certain from Experience, that a flow, gentle, and infenfible Motion of the Diaphragm alone +, without the least

* It is before observed, that the Sternum is a longitudinal Bone dividing the Breast into two equal Parts; this Bone at its inserior Part, commonly called the Pit of the Stomach, terminates in a kind of sharp or pointed Production, generally called the Xiphoide or Ensistem Cartilage, from the Resemblance it bears to the Point of a Sword or Dagger. The Terms Apophysis or Epiphysis imply nearly the same with the Word Excrescence.

† The Diaghragm is a muscular Kind of Par-

Motion of the Ribs, is sometimes sufficient in the Cases we have specified, to support and carry on Respiration; and in such a State it is absolutely impossible, that the Water should have any Motion communicated to it: We are however carefully to guard against taking the fermentative Motion of the Abdominal Humours of a Corpfe, which may possibly be conveyed to the Water in the Vessel, for the genuine and real Motion of the Organs subservient to Respiration; neither: ought we, after a fruitless and unfuccessful Trial of these Methods, to imagine that there is no Hope left, and for that Reason cruelly abandon, to an unavoidable Death, a Patient as yet not dead, and who perhaps would not die at that Juncture, if we should neglect no Means of recalling him to Life; for this Purpose, we ought to irritate his Nostrils by introducing into them Sternutatories, Errhines, Salts, stimulating Liquors, Synapisms, the Juice of Onions, Garlic, and Horse-radish, or the feather'd End of a Quill, or the Point of a Pencil: We must also rub his Gums

tition, separating the Thorax from the Abdomen, and which bending downwards in the latter, by that Means not only augments the Capacity of the former, but also contributes greatly to facilitate the Entry of the Air into the Lungs: In some Persons the Dilatation of the Breast, even in a natural State, depends entirely on the Diaphragm.

Gums frequently and strongly with the same Substances; stimulate his Organs of Touch with Whips and Nettles; irritate his Intestines by Means of Clysters and Injections of Air or Smoke; agitate his Limbs by violent Extensions and Inflexions; and if possible shock his Ears by hideous Shrieks and excessive Noises; only we ought by no Means to conclude, that the Sense of Hearing is totally lost, because the Person under Examination does not discover himfelf to be possessed of it, by the slightest Motion of the Eye-lids, the Lips, the Fingers, or any other Parts of the Body; for as it is generally thought, that the Heart is the first Part of the Body which moves, fo those who, after they are deprived of all the other Senses, give distinct Relations of every Thing they have heard during that Time, can attest, that the Sense of Hearing remains longer than any of the rest: The Truth of this is in a remarkable Manner confirmed by the Testimony of a celebrated Priest, who having affirmed, that it was unlawful to give Absolution to a dying Perfon, who by no Signs discovered that he had the Sense of Hearing, altered his harsh Opinion, after he himself had fallen into a Deliquium so violent, as to deprive him of all Motion, tho' at the same Time he distinctly heard the whole Conversation of which the world in her a first those

those, who were present, when his Missor-tune happened.

SECT. IV.

N order to discover the Signs of Life or Death, it is in the last Place necesfary to call in the Aid of that Part of Medicine, whose Effects, according to Celfus, are most fensible and manifest. The Chirurgical Measures, then esteemed most proper for these important Purposes, are principally Wounds made either with pricking or cutting Instruments, or by Means of Fire; these Dilacerations of the Parts have fometimes recalled from apparent Death to real Life, Persons on whom milder Methods had no more Effects, than they would have produced on Stocks on Statues; for the minute Fibrils of the Extremities of the Nerves, which principally constitute the Organ of Touch, being vellicated, divided, lacerated and stript of the Epidermis which covers them, by the violent Action of Fire, or of a cutting or pricking Instrument, with inconceivable Expedition, and in a Manner hitherto unknown, transmit a Sense of the most exquisite and lively Pain to the common Sensory or Seat of all the Sensations. For this Reason, pricking the Palms of the Hands, or the Soles of the Feet, and scarifying the Scapulæ, Scapulæ, Shoulders and Arms, are Methods which have often proved fuccessful in determining with respect to Deaths, before dubious and uncertain. From this we may easily account for the Success of the rash Conduct of a certain Person, who, thrusting a long Needle pretty far under the Nail of an Apoplectic Woman's Toe, who had no Signs of Life, by that seemingly cruel Expedient quickly restored her to herself. The Instances already enumerated sufficiently evince, that fuch Incisions have shewn the Persons, on whom they were made, to be really alive after they were taken for irretrievably dead. But the Scrutinies made by Burnings are generally esteemed the most efficacious of all others, for deciding with respect to Life or Death. Thus the celebrated Lancisi, in Ir. de Mort. Subit. Lib. II. Cap. v. N. 11. informs us, that some labouring People, who could not by the most strong and powerful Remedies, be rouzed from profound Apoplexies, have been instantly restored to Life by applying hot Irons to the Soles of their Feet; other Authors recommend the Crown of the Head, as the Place most proper for an Operation of this Kind: But we may with the same View, and with equal Success, apply Water when boiling, common Wax when melted, Spanish Wax when burning, or even a Match when lighted, to the Hands, to the Arms,

or to the Skin of any other Part of the Body. Of the same Nature we may also reckon the violent Frictions of a certain Physician, mentioned in Eph. Nat. Cur. Die 1. an. 8. who perceiving, that the Limbs of a Man who was believed to be dead, were still flexible and pliant, tho' no Pulse was felt, tho' the Immobility of the Cotton applied to his Mouth, shewed that his Respiration was gone, and tho' the most acrid Clysters were injected to no Purpose, yet ordered the Soles of his Feet to be strongly and incessantly rubbed with a coarse Haircloth, immersed in an highly saturated Brine; by which Means he recalled his Patient to Life in three Quarters of an Hour. However efficacious these Methods of determining, with respect to Life or Death, may appear, it is nevertheless certain, that they are sometimes insufficient and fallacious: For Confirmation of this I shall, without collecting other Instances, appeal to a memorable History communicated to the Royal Academy of Sciences, in which we have the furprizing Account of a certain Soldier, who had no Sense of Pain created by the Appli-cation of a red hot Iron to the Parts of his Body, tho' all the Organs of voluntary Motion were in a good Condition.

SECT. V.

IF any should ask, why so many Scrutinies? or why so fond of Incisions, Punctures, and Burnings? I answer, The Fate of others strikes Terror into myself*: Twice the Physician condemned me to the Grave; first in my Infancy, and then in my Youth. Besides, the celebrated Zacchias, in Qu. Med. Leg. Tit. 1. q. 9. n. 54. justly observes, "That no one ought either to blame or ridicule the most prudent Phy- ficians for trying all the Methods they possibly can, on those who are either really dead, or believed to be so, in order to discover whether they have still any remaining Principle of Life." Lancist also, in Tr. de Mort. Subit. L. I. Cap.

*Mr. Winflow here alludes to a Paffage of one of the Fables of Phædrus relating to a fick Lion, who in his Distress received a Visit from a Fox; but the Fox, without approaching the Lion, thought proper to testify his Concern and Sorrow at a Distance: Upon this, the Lion asked the Reason of such a Piece of Conduct, and the Fox as readily satisfied him by the following Answer; The Example of others makes me afraid; for I see the Footsteps of those who have entered into your Den; but I can discover no Marks of their ever having returned. This Allusion is just and beautiful; since for one Person preserved after Interment, many have in all Probability died in their Graves.

15. to the same Purpose, quotes the following Expostulation of the incomparable Quintilian; "For what Purpose do ye ima-"gine that long delayed Interments were "invented? Or on what Account is it that " the mournful Pomp of funeral Solemni-"ties is always interrupted by forrowful Groans and piercing Cries? Why, for no other Reason, but because we have " feen Persons return to Life, after they " were about to be laid in the Grave as "dead. For this Reason, adds Lancisi, the Legislature has wisely and prudently prohibited the immediate, or even too " speedy Interment of all dead Persons; " and especially of such as have the Missortune to be cut off by a sudden Death." The same Author also in the subsequent Chapter earnestly intreats, not only Physicians, but likewise all benevolent and welldisposed Persons, who may have an Opportunity to try these and all other possible Methods of recalling the Dead to Life. And in Lib. II. Cap. 5. he warmly exhorts Physicians to be diligent and industrious in finding out new Measures, if not for a perfect Recovery of the Dead, yet at least for regaining a happy, tho' perhaps a short Portion of Time, in which they may be duly touched with a Sense of their Sins, and recommend themselves to that Being, who is alone able to pardon them (8).

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The celebrated Riolanus, formerly an Ornament to the Faculty of Medicine in Paris, has long ago furnished us with a similar Instance of chirurgical Compassion; since when, speaking of the Bodies of hanged Persons, by public Authority destined to Dissection, he tells us; "That so long as " the Body is warm, and the Person but " lately executed, we are not to diffect " him; fince, if there is still any Prospect " of recalling him to Life, we are equally " bound by the Principles of Humanity " and Charity to do all we can for that Pur-" pose, in order to procure him, if possible, a favourable Opportunity of Repentance." But as we have not, especially in the Cases hitherto specified, any absolutely certain Signs of Death, except the livid Spots which appear on the Skin, and the cadaverous Scent of the Subject, which is widely different from all other Smells, even that arising from the Excrements, or the still more disagreeable Odour peculiar to certain malignant Ulcers; the safest Way is to let the supposed dead Person remain in Bed, covered with Clothes, and his Head supported with a Bolster and Pillow, as if he was alive, and not to put him in his Shrowd and Coffin, till two or even three Days after, when his whole Body is become spontaneously cold under the Bed-clothes, and all his Limbs are rendered rigid and inflexible. Terilli,

Terilli, a celebrated Physician of Venice, in Tr. de Causis Mort. repentin. Sect. vi. Cap. 2. gives us the following memorable and important Advice; "Since, says he, the Body is sometimes so depriv'd of every vital Function, and the Principle of Life reduc'd fo low, that it cannot be distinguished from Death, the Laws both of natural Compassion and reveal'd Reli-66 gion oblige us to wait a fufficient Time for Life's manifesting itself by the usual Signs, provided it should not be as yet " totally extinguished; and if we should act a contrary Part, we may possibly become Murderers, by confining to the " gloomy Regions of the Dead, those who are actually alive. Now the Time, by "the Generality of Authors, allotted as suf-"ficient for this Purpose, comprehends three natural Days, which amount to " about seventy-two Hours; and if during this Interval no Marks of Life should appear, but on the contrary the Body should diffuse a fetid and cadaverous " Smell, we may rest satisfied with the Certainty of the Death, and consequently proceed to the Interment without any Hesitation of Mind, or Scruple of Con-" fcience."

The celebrated Zacchias is of the same Opinion; fince in Tom. III. Conf. 79. N. 21. he tells us, "That there is no other:

" infallible:

" infallible Proof of Death, but a begin-" ning Putrefaction in the Body (9)." We ought not therefore to be furpriz'd at the fermingly whimskal Precaution of some Persons, who have in their Wills ordered, that they should not be put in their Cossins till at least forty-eight Hours after their apparent Death, and till all the different Methods of Incision, Puncture, and Burning, have been tried upon them, in order to acquire a greater Certainty of their Deaths. But without running back into past Times for Instances of this Precaution, 'tis sufficiently known, that a Will of the same Nature was in the Beginning of the Year 1742 not only made by Madame de Corbeville; a Lady of Distinction and a Caponess, but also faithfully and punctually fulfilled by her illustrious Executor. As for my own Part, I earnestly request of those who shall have an Opportunity of feeing me dead, that they would not only use the Methods already prescrib'd, but also every other possible Expedient, in order to fatisfy themselves whether I have really paid the last Tribute of human Nature. From what has been faid 'tis fufficiently obvious, that the Signs of a dubious Death are less uncertain by Chirurgical, than by any other Methods.

ADDITIONS.

(1.) Single Fact of whatever Kind, when well attested, is sufficient to make such lasting Impressions on the prudent and judicious Part of Mankind, as are capable of keeping them continually on their Guard; but this is not universally the Case; for Persons who pretend to think in a Manner different from other Men, are always fo full of Scruples, and fo inviolably attach'd to certain Peculiarities of Thought, rather inspir'd by a Desire of being esteem'd singular, than produc'd by a Dread of believing without sufficient Evidence, imagine that they have a just Title to look upon single Facts as exceptionable Accidents from which no general Conclusion can be drawn. Others have their Minds but slightly and superfici-ally touch'd by the most striking Incidents of this Kind; whilft the Imaginations of others are so insensible, as to require reiterated Shocks before they can be thoroughly rous'd to a due Regard and Attention to Truth.

As an Author, therefore, who is desirous of being universally useful, or who writes

on Subjects in which all Mankind without Exception are deeply interested, ought to overlook or neglect none of those, into whose Hands his Works may fall, I shall add to the Histories collected by Mr. Winslow, in order to prove the Uncertainty of the Signs of Death, some others, whose Multiplicity will justify the Precautions of the Prudent, destroy the vain Pretexts of the Incredulous, make deeper Impressions on the Minds of the Giddy, and alarm those whose Insensibility calls for the most powerful and commanding Evidence.

The Truth, then, established in Mr. Winslow's Differtation was not first discovered by that learned Gentleman, since the most remote and distant Ages furnish us with glaring Instances of the Uncertainty of

the Signs of Death.

Thus Plutarch informs us, that a certain Person falling from an Eminence was cut off by the Fall; tho' there was not the least Appearance of any Wound; but three Days after, he suddenly resumed his Strength, and returned to Life as his Friends were conveying him to the Grave.

To this History Kirchman adds the fol-

lowing related by Apuleius.

Asclepiades, a celebrated Physician, in his Return from his Country Seat met a large Company conveying a Corpse to the Grave. A Principle of Curiosity induced him to ask

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the Name of the deceased Person; but Grief and Sorrow reigned fo universally, that no one returned him an Answer: Upon which, approaching the Corpfe, he found the Whole of it rubbed over with Perfumes, and the Mouth moistened with a precious Balm according to the Custom of the Greeks; then carefully feeling every Part, and discovering latent Signs of Life, he forthwith affirmed that the Person was not dead. Some inclined that his Discourse should be listened to, whilst others, especially the Friends, and above all the Executors of the Deceased, ridiculed the Physician, and slighted his Profession; so that Asclepiades with some Difficulty obtained a short Respite: But at last the Deceased being dragged from the Hands of the covetous Bearers, was carried back to his own House, where by the Efficacy of proper Remedies he was forthwith recalled to Life. Celsus in Book II. Chap. 6. makes mention of this Accident.

Eusebius, Theodoret, and Calixtus, in Tr. de Immort. Anim. Cap. viii. from the tenth Book of Plato's Republic, relate the History of one Erus, an Armenian, who was slain in Battle. Ten Days after, when the surviving Soldiers came with a View to interthe Dead, they found all the Bodies corrupted except his; for which Reason, they conveyed him to his own House, in order to have him interred in the usual Manner;

but two Days after, to the great Surprize of all who were present, he returned to Life when laid on the Funeral Pile. This Narrative related by Quenstedt is taken from Korman's Treatise De Miraculis Mortuorum, and we have Reason to believe that it is the fame with the Accident related by Valerius Maximus, Book I. Chap. viii. for there is no Difference of Circumstances, except with respect to the Name and Native Country of the deceased Person, whom the last quoted Author calls Phereus, and fays he was a Native of Pamphilia; besides, what induces me to believe, that in one or other of the Relations there is a Mistake of the Name, is because Valerius Maximus also quotes Plato as his Voucher, and because it is hardly posfible to conceive, that two Events so exactly fimilar in every minute Circumstance should happen, Korman however, in his Treatife De Miraculis Mortuorum, relates both these Facts, ascribing to Plato the History of Phereus of Pamphilia, and quoting Noel Taillepied, in his Treatise De Apparitione Spirituum, for the Narrative relating to Erus the Armenian, without mentioning that the last quoted Author also took it from Plato: But whether there is any Mistake or not, Quenstedt from these two Histories very justly concludes, "That the Soul fometimes remains in the Body, when the Senses are fo fettered, and as it were locked up, that C 3

" it is hard to determine whether the Person is dead or alive."

Pliny, in his Natural History, Book VII. Chap. 52. which treats of those who have return'd to Life when they were about to be laid in the Grave, tells us, that Acilius Aviola, a Man of so considerable Distinction, that he had formerly been honoured with the Consulship, return'd to Life when he was upon the Funeral Pile; but as he could not be rescued from the Violence of the Flames, he was burnt alive. The like Missortune also happen'd to Lucius Lamia, who had been Prætor. These two shocking Accidents are also related by Valerius Maximus.

Celius Tubero had a happier Fate than his two Fellow-Citizens; since, according to Pliny, he discover'd the Signs of Life before it was too late. His State however was far from being eligible, since being laid on the Funeral Pile, he stood a fair Chance of being expos'd to the like Missfortune. Pliny from the Testimony of Varro adds, that when a Distribution of Lands was making at Capua, a certain Man, when carried a considerable Way from his own House, in order to be inter'd, return'd home on Foot. The like surprizing Accident also happen'd at Aquinum. The last Instance of this Nature related by the Author occur'd at Rome; and Pliny must, no Doubt, have been intimately acquainted with all its most minute

Circum-

Circumstances; since the Person to whom the Misfortune happen'd, was one Cerfidius, the Husband of his Mother's Sister, who return'd to Life after an Agreement had been made for his Funeral with the Undertaker, who was probably much disappointed when he found him alive and in good Health.

These Examples drawn from the Roman History greatly contribute to establish the Uncertainty of the Signs of Death, and ought to render us very cautious with respect to Interments. But that we may not interrupt the Course of our Histories, we shall in another Place consider the Precautions taken by the Romans, in order to afcertain the Death or Life of their Citizens: We must however observe, that Manilius fo firmly believ'd that his Countrymen had inter'd living Persons, that in Astronom. 4. he expresly afferts, that some had return'd to Life and risen even from their Graves.

Ex ipsis quidam elati rediere sepulchris.

Greece and Italy are not the only Theatres on which fuch tragical Events have been acted, fince other Countries of Europe also furnish us with Instances of a like Nature.

Thus Maximilian Misson, in his Voyage through Italy, Tome I. Letter 5. tells us, That the Number of Persons who have been inter'd as dead, when they were " really alive, is very great in Comparison " of those who have been happily rescued

ee from

" from their Graves; for in the Town of Cologne, Archbishop Geron, according to Albertus Krantzius, was inter'd alive, and died for want of a seasonable Releasement. It is also certain, that in the same Town the like Misfortune happened to Johannes Duns Scotus, who in his Grave tore his Hands and wounded his Head. I am not ignorant, that one George Herwart, who had a profound Veneration for Duns Scotus, positively denies this Fact, as too shocking and disagreeable, in Opposition to Bezovius, one of the most considerable Authors who affert it: But neither Bezovius, nor Paulus Jovius, nor Latomus, nor Majoli, nor Vitalis, nor Garzoni, nor any of the Authors who relate this Accident, can be suspected of an Intention " either to disguise or conceal the Truth; " fo that we may reasonably give Credit to their Testimonies."

"their Testimonies."
Immediately after Misson subjoins the following Relation: "Some Years ago the "Wise of one Mr. Mervache, a Goldsmith of Poistiers, being buried with some Rings on her Fingers, as she had desired when dying, a poor Man of the Neighbourhood being apprized of that Circumstance, next Night open'd the Grave, in order to make himself Master of the Rings; but as he could not pull them off without some Violence, he in the Attempt

" wak'd

wak'd the Woman, who spoke distinctly, and complain'd of the Injury done her: Upon this, the Robber made his Escape, and the Woman, now rous'd from an Apoplectic Fit, rose from her Cossin, which for her was luckily open'd, return'd home to her own House, and in a few Days recover'd a perfect State of Health: She not only surviv'd this Mistortune for many Years, but also bore several Children, some of whom at pre-

es Poictiers.

What induc'd Mission to relate these Histories, was a certain Piece of Painting preserved in the Church of the holy Apostles at Cologne, in order to keep up the Memory of a certain Accident, which that Traveller relates in the following Manner:

" fent follow the Business of their Father at

"In the Year 1571, the Wife of one of the Magistrates of Cologne being inter'd with a valuable Ring on one of her Fingers, the Grave-digger next Night open'd the Grave, in order to take it off; but we may readily suppose, that he was in no small Consternation when the suppos'd dead Body squeez'd his Hand, and laid fast hold of him in order to get out of her Cossin: The Thief however disense gaging himself, made his Escape with all Expedition; and the Lady disentangling herself in the best Manner she could,

"went home, and knock'd at her own Door; and in order to get the readier Admission, and prevent her being long expos'd to the Cold, she call'd a Servant by his Name, and gave him a fuccinct Account of what had happen'd to her; but the Servant treated her as a Phantom, and with a Mind full of Terror ran to relate the Accident to his Master, who being as incredulous as himself, ridicul'd

" him for his Folly: The Lady in the mean time stood shivering in her Shroud,

"till at last the Door was open'd to her; " after which, being warm'd, and treated in

" a proper Manner, she resum'd as perfect

" a State of Health, as if no fuch Misfor-

" tune had befallen her."

Simon Goulart, a pretty old tho' judicious Author, gives us a more accurate and circumstantiate Detail of this Accident in his admirable and memorable Histories, printed at

Geneva in the Year 1628.

The Lady, then, to whom this Misfortune happen'd, and whose Name was Reichmuth Adolch, was suppos'd to fall a Victim to a Pestilence which rag'd with such impetuous Fury, as to cut off most of the Inhabitants of Colegne; soon after however, according to Goulart, she not only " recovered her Health, but also brought into " the World three Sons, who in Process of

"Time were advanced to Livings in the

" Church:

Church: But having for feveral Years after this Deliverance liv'd honourably with her Husband, she at last died a natural Death, and was inter'd near the Door of the holy Apostles Church, under " a lofty and magnificent Monument of Stone. In order to perpetuate the Memory of her Fate, there was affix'd to the Monument a large Piece of Painting, in which the Accident was not only represented in a masterly Way, but also 65 describ'd in German Verse. In the Year 56 1604, John Bussenmacher, Citizen and 6.6 Merchant of Cologne, in order to diffuse 66 the Knowledge of this Piece of History, 6.6 published a small Print taken from the 66 original Defign; and tho' at Cologne I 6.6 have often seen that noble Piece of Painting, which always warm'd my Soul with the tender Impressions of Humanity and 6.6 Compassion, yet with the same View I still preserve the Print published by Bus-

se senmacher."

In all this Narrative there is not a fingle Word of the Ascension of the Horses to the Granary of the surviving Husband, which however Misson has inserted in his Relation, tho' I know not for what Reason; since he is fo far from believing it, that he at best esteems it a Tradition or popular Error, originally fuggested by those who preserved the Memory Memory of this Event by Monuments po-

sterior to its genuine Date.

As a farther Proof of the Reality of similar Resurrections, Mission in his third Volume relates the History of Francis de Civille, who, in the Registers where his Fate is recorded, is said to have been three Times dead, three Times buried, and by the Grace of God three Times raised from the Dead. But that we may confine ourselves precisely to what relates to the present Subject, we shall only give an Extract of Mission's Relation.

Francis de Civille then, a Gentleman of Normandy, was a Captain of a Company confisting of an hundred Men, in the City of Rouen, when it was besieged by Charles the Ninth; at which Time Civille was twenty-fix Years of Age: In an Attack made by the Enemy he was wounded, and falling from the Rampart into a Ditch below it, was by some Pioneers stript of his Cloaths, thrown into a Grave along with another Body, and covered with a little Earth; in this Condition he remained from eleven o'Clock in the Forenoon, till half an Hour after fix in the Evening, when his Servant came to take him out of his Grave: This faithful Domestic embracing him, perceived some Signs of remaining Life, and for that Reason carried him to a House in which he used to lodge, where he continued

five.

five Days and five Nights, without either speaking, moving, or discovering the least Sign of Sensation, tho' he was now as hot by the Violence of a Fever, as he had before been cold in his Grave. The Town being taken, the Servants of an Officer belonging to the victorious Army, who intended to lodge in the House where Civlile was, laid him upon a Straw-bed in a back Chamber, from a Window of which he was thrown by fome Persons, who bore an Enmity to his Brother; but luckily he fell upon a Dunghill, where he remained in his Shirt more than three Days and three Nights, at the End of which Time one of his Friends, furprized to find him alive, fent him to a House in Rouen, where his Wounds being dreffed, and due Care taken of him, he was perfectly cured.

In this History I can only find two Interments and as many Resurrections; nor are any more mentioned in the memorable and admirable Histories of Goulart, where the Wound of Civille, and all the Accidents subsequent to it are fully described: But I have heard the following traditional Account of his third Interment and Resurrection.

The Mother of Civille happening to die big with Child in her Husband's Absence, was interred without any Thoughts of preferving the Infant by Means of the Cesarian Section. The Day after the Interment the

Husband.

Husband coming home, was no Doubt struck with Surprize, not only at the Death of his Wife, but also at the little Care which had been taken of the Child. With a View therefore to satisfy himself, he ordered his Wife to be raised from the Grave, and an Aperture to be made in her Abdomen, from which Francis de Civille was taken alive: Tho' this Circumstance is foreign to our Subject, yet its surprizing Nature apologizes for its Insertion.

Simon Goulart, before quoted, has wrote a Chapter, the Title of which is, That Persons who die of the Plague, or are cut off by any other violent and sudden Accident, ought not to be so soon interred as they generally are in several Parts of the World: He begins this Chapter with an Extract of a Letter wrote by William Fabri, an eminent Surgeon, and directed to Doctor John James Crafft, Physician at Neufchastel. Goulart cloaths Fabri's Thoughts in the following Drefs: Levinus Lemnus, in the third Chapter of his Book concerning the fecret Miracles of Nature, has just Reason to condemn the too-precipitate Interment of Persons " over-powered by Lethargies, Apoplex-" ies, or Suffocations of the Matrix; for I know there have been some, supposed to be irretrievably cut off by these Disorders, who, resuming Strength and re-" turning to Life, have raifed the Boards of 66 their " their Coffins. Nor should any supposed dead Persons, especially those who have before been subject to Apoplexies and Lethargies, be too foon confined to Coffins, because in such Disorders the Soul 66 only retires as it were to her most secret 66 and concealed Residence, in order to make the Body afterwards fenfible, that 66 fhe had not entirely forfaken it. Examples of this frequently occur in ancient as well as in modern Authors. Fabri adds, that in the Time of the Plague, or when 46 any other contagious or malignant Difeases rage, Physicians should advise the 66 66 Interment of the Dead with all possible Expedition, because their Bodies, like 56 extinguished Lamps, Torches, or Flam-66 beaux, diffuse an Odour no less disagree-66 able than prejudicial: But fuch fudden Interments are neither fafe, nor confistent with that Humanity and Compassion, which ought to animate the Breasts of Christians, as is obvious from the following Histories." But what is surprizing, and even dishonourable to human Reason. too often the Victim of some Prejudice or other, is that Fabri relates these three Histories to Crofft, without drawing a just Conclusion from them, and even without obferving, that as at other Seasons, so also in the Times of peftilential and contagious Difeafes we ought not to inter Persons precipitately,

tately, and before we are thoroughly fatisfied.

with respect to their Deaths.

The first of these Histories gives an Account of a Man of twenty-two Years of Age, of the Town of Meniere, in the Canton of Fribourg, who, in the Year 1566, was feiz'd with a Plague, which cut off almost the whole Family wherein he lived, and he himself being taken for dead, on the fourth Day was laid out as fuch. Eight Hours however after his suppos'd Death, the Persons who were putting him in his Cossin, finding that he was neither cold nor stiff, began attentively to examine the State of the Body, in which they still perceiv'd a fmall and languid Degree of Respiration: For this Reason they put him into a warm Bed, applied hot Bricks to his Feet, and forc'd him to swallow a small Quantity of. Malmsey Wine, by which Means he not only return'd to Life, but recover'd so fast, that in a Month's Time he was able to attend his usual Business. After this Accident he proved the Father of seven Children, and enjoy'd a good State of Health in the fixtyfourth Year of his Age.

The fecond History is that of Reichmuth

Adolch already related.

The third is that of the Master of an Innin the Town of Cleves, who, seventeen Years before he recounted the Story to Fabri, sell into such a Syncope, on account of an acute

and

and violent Disease, that he would have been interred for dead, if one Mr. John Wier had not recall'd him to Life by confining him to a warm Bed, applying Epithems * to his Wrists and the Region of his Heart, and forcing him now and then to swallow some Drops of corroborating and cordial Liquors. These Measures, however, serv'd only to divert the Company at the Expence of the Physician, till such Time as their Propriety was justified by the Recovery of the Patient.

Doctor Crafft, in order to make a suitable Return to his Correspondent Fabri, remits him the five following Histories; which, as the Facts are only subservient to our Purpose, we shall abridge as well as the rest.

Burgundy, and especially the Town of Dijon, was in the Year 1558 afflicted with a violent Plague, which cut off the Inhabitants so fast, that there was not Time to make a separate Grave for each dead Person; for which Reason large Pits were made, and filled with as many Bodies as they could contain. In this deplorable Conjuncture

^{*} Epithems are either simple or compound Medicines externally applied, in order to produce such internal Effects as the Physician intends: These Topics are of various Kinds, such as Antisebrile, Stomachic, and Cordial, of which last Quality were these here mentioned.

Mrs. Nicole Lentillet shared the common Fate, and after labouring under the Disorder for some Days, fell into a Syncope so profound, that she was taken for dead, and accordingly buried in a Pit with other dead Bodies; the next Morning after her Interment she returned to Life, and made the strongest Efforts she could to get out; but her Weakness and the Weight of the Bodies with which she was covered, rendered her incapable of executing her Design. In this wretched Situation she remained for four Days, till the Grave-diggers coming to inter other Bodies, took her up and carried her to her own House, where she recovered a perfect State of Health.

The second Instance of this Nature, mentioned by Doctor Crafft, happened immediately before he wrote the following Account of it. A labouring Man of Courcelles near Neuschastel fell into so prosound a Syncope, that he was taken for dead; but the Persons who were putting him in his Grave without a Cossin, perceived some Motion in his Shoulders, for which Reason they carried him to his own home, where he persectly recovered. This Accident laid a Foundation for his being called the Ghost of

Courcelles.

A Lawyer of Vesoul, a Town of Franche-Comté near Besançon, so carefully concealed a Lethargy to which he was subject, that

No-body knew any thing of his Disorder, tho' the Paroxysms returned very frequently. The Motives which principally induced him to this Secrecy, was the Dread of losing a Lady to whom he was just about to be married: Being afraid, however, lett some Paroxysms should prove fatal to him, he communicated his Case to the Sheriff of the Town, who, by Virtue of his Office, was obliged to take Care of him, if fuch a Misfortune should happen. The Marriage was concluded, and the Lawyer for a con-fiderable Time enjoyed a perfect State of Health; but at last he was seized with so violent a Paroxysm of the Disease, that his Lady, to whom he had not revealed the Secret, not doubting of his Death, ordered him to be put in his Coffin: The Sheriff, tho' absent when the Paroxysm seized him, yet luckily returned in Time to preserve him; for he ordered the Interment to be delayed, and the Lawyer returning to Life, furvived the Accident fixteen Years.

Doctor Crafft's fourth History is that of a certain Person who was conveyed to the Church, in order to be interred, but one of his Friends sprinkling a large Quantity of Holy Water * on his Face, which was un-

was found. He immself says, that as soon as he was under the Water his Body became rigid, and lost not only the Power

covered, he not only returned to Life, but

also resumed a perfect State of Health.

The fifth Instance of a Recovery from supposed Death, related by Doctor Crafft, is that of James de Lavaur, Lord of the Manor of Boudry, in the County of Neufchastel, who being seized with a violent Cardialgia, fell into so profound a Syncope, that he was taken for dead: But the Physician brought to his Relief from Fribourg being of a contrary Opinion, blowed powdered Pepper into his Nostrils, by which Means he was not only recalled to Life, but also furvived his Misfortune for a confiderable Time, according to Goulart; from whom the following Passage is quoted by William Fabri, in the second Century of his Chirurgical Observations, Obs. 96.

" Doctor Crafft subjoins other Histories of Persons who, being interr'd alive, have

expir'd in their Graves and Tombs, as has afterwards been discovered by vari-

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ous Marks made not only in their Se-pulchres, but also in their own Bodies. He in a particular Manner makes men-

tion of a young Lady of Auxbourg, who

falling into a Syncope, in Confequence of a Suffocation of the Matrix, was bu-

ried in a deep Vault, with of Fring ne-Comté near Besançon, so carefully concealed

a Lethargy to which he was subject, that

thought it sufficient to have the Vault carefully shut up. Some Years after,

however, one of the same Family hap-66 66

pening to die, the Vault was open'd, and the Body of the young Lady found on 66

the Stairs at its Entry, without any Fin-66

gers on the Right Hand."

As the Histories already related only give an Account of the Refurrection of Persons cut off by Sickness or Wounds, we shall now consider the Fates of some Persons, who have been drown'd and hang'd. Mr. Derham then, in the fixth Chapter of the fourth Book of his Physico-Theology, quotes the following History from Rechelin, De Aere & Alim. defect.

" About eighteen Years ago, a Gardner of Tronningbolm, now fixty-five Years of 66

Age, and fufficiently vigorous and robust for one at that Period of Life, 66

made an Attempt to relieve a Person 66 66

who had fallen into the Water; but not

being fo cautious as he ought, he ven-66 66

tur'd upon the Ice, which broke and let 26

him fall into the Water, which at that Part was eighteen Ells in Depth. He 66

went perpendicularly to the Bottom, 66

where his Feet stuck; and in this Situa-66

tion he remain'd sixteen Hours before he 66

was found. He himself says, that as soon 66

as he was under the Water his Body became rigid, and lost not only the Power

of Motion, but also all Sensation, except that he thought he heard the Sound of " fome Bells, which were then ringing at Stockholm: He at first also perceiv'd, as it were, a Bladder before his Mouth, which hindered the Water from entring by that Passage, tho' he found it entring freely into his Ears; a Circumstance which produc'd a Dulness in his Hearing for some Time after. He was sought for in vain during fixteen Hours, till at last a Hook being fixed in his Head, he was by its Means taken up; and afterwards said he was sensible of that Part of his Fate. Whether from the Custom of the Country, or the Persuasion of particular Persons, Attempts were made to restore him to Life: For this Pur-33 pose he was wrapt up in Blankets, lest the Air entring too precipitately into his Lungs should prove fatal to him. In this Condition he was gradually warm'd; then being wrapt in warm Sheets, he was rubb'd and tormented till the Motion of his Blood, which had been check'd " for fo many Hours, return'd. At last he was totally restor'd by Means of Cordials and Anti-apoplectic Liquors. He " as yet bears the Mark made by the "Hook, and fays, that he is still subject. to violent Pains in his Head. This fin-" gular Accident, attested by the Oaths of 66 EyeEye-Witnesses, induc'd the Queen to

give him an annual Pension, and he was

presented to the Prince, in order to give

him an Account of what had happened .66 to him.

" Mr. Tilasius, Keeper of the King's Li-

brary, has wrote the History of a Woman who remain'd under Water for three whole

Days, who was restor'd to Life almost in 56

the same Manner with the Gardner; and 66

who was alive when Tilasius wrote the

Account of her. To this we may add the Testimony of Mr. Burmann, who assures us, that in Boness in Pithovia, he 66

heard a Funeral Sermon preach'd upon

the Death of one Laurence Jones, a Man

of feventy Years of Age, who, as the Preacher faid, was drown'd when fixteen

Years old, and continued feven Weeks in the Water; notwithstanding which

Accident he return'd to Life, and en-66

joy'd good Health.

"It is furprizing, continues Rechelin, that Stories so well known, and so sin-66

gular in themselves, should not be consecrated to Immortality by the Attesta-5,6

tions of Physicians of Note. As I be-

lieve that there are a great many fecret

things in Nature, and daily observe Ac-

cidents, which I before thought impossi-

ble; so I have no Reason to doubt of furprizing Facts related by so many Men

" of Learning, nor formally to deny a "History, which at first appears incredi-

" ble."

Mr. d'Egly, a Member of the Royal Academy of Inscriptions, has communicated to me the Measures he took in order to preserve the Life of a certain Swiss, who made a good Livelihood by plunging into the Water, and thrusting himself into the Holes in which he thought the large Fishes were contained.

This adventurous Swiss being one Day employed to provide Fish for a Company, who intended to have a splendid Dinner, promised to furnish them with a Dish of fine Fish: His Employers accompanying; him to the Brink of the River, and feeing; him plunge into the Water, retired, thinking that he would not fail to keep his;

Word.

But when the Hour appointed for Dinner came, the Swiss did not appear with his Part of the Entertainment; so that when the half of the Afternoon was spent, the Company went to the River in order to know the Reason of their Disappointment: The Clothes of the Diver lying on the Brink, laid a Foundation for suspecting the Miffortune which had befallen him; accordingly they ordered him to be searched for with Hooks, in the Place into which they had feen him plunge, and at last being found! found, he was taken out of the Water, tho' wounded in feveral Parts.

As the Swiss had been drowned for about nine Hours, the Curate of the Place, who was present, inclined that he should be forthwith interred, and he had undoubtedly been confined to the Grave, had not Mr. d' Egly, who saw a kind of Ebullition in the Water discharged from his Mouth, asserted that he was not dead; for he justly attributed that Ebullition to the faint Re-

mains of Respiration.

This Observation made a deep Impression on the Spectators, who carried him into an adjacent House, where having laid him out at full Length, they compressed his Abdomen in order to facilitate the Difcharge of the Water he had swallowed; when in about three Quarters of an Hour having discharged a considerable Quantity of Water, he moved one of his Legs, which was a sufficient Proof, that he was still alive: For this Reason he was wrapt up in warm Sheets, and gradually restored to a natural Heat; then he was conveyed to a warm Bed, where, his Life becoming more and more conspicuous, a liberal Venesection was made, which was succeeded by a Sigh, then by a small Degree of Knowledge of what passed, and a little after by a persect Cure.

This important Service ever after touch'd the Heart of the Swiss with a grateful Sense

The UNCERTAINTY of of the Obligations he lay under to Mr. d

Egly.

Mr. Derham, in the Part before quoted, gives us two Instances of the Resurrection of hanged Persons. The first, seen by Pechlin, and recorded in Tr. de Aere & Alim: defect. Cap. vii. is that 'of a certain Woman hanged, and in all Appearance dead, who was nevertheless restored to Life by a Phy-

fician accidentally coming in, and order-ing a plentiful Administration of the Spirit

s of Sal Ammoniac.

The other Accident of this Nature is by Mr. Derham related in the following Words.

' The Story of Anne Green, executed at · Oxford, Dec. 14, 1650, is still well re-

e membered among the Seniors there: She

was hanged by the Neck near half an Hour, some of her Friends thumping her

on the Breast, others hanging with all their

Weight upon her Legs, sometimes lifting her up, and then pulling her down again

with a sudden Jirk; thereby the sooner to

dispatch her out of her Pain, as the print-

ed Account of her informs us. After she

was in her Coffin, being observed to

breathe, a lusty Fellow stampt with all

his Force, on her Breast and Stomach, to

oput her out of her Pain: But by the Af-of fistance of Dr. Peity, Dr. Willis, Dr.

Bathurst, and Dr. Clark, she was again

brought to Life; I myself saw her many

'Years after, between which Time, and the

Date of her Execution, she had, as I am

' informed, born several Children.'

Tho' these two Histories lay a Foundation for a Variety of Reslexions, yet we shall only observe, that in both Cases a precipitate Interment would have been Murder; and that all the Presumptions of Death are not sufficient to authorize the Neglect of such Precautions and Tests, as are proper to ascertain the real State of the Body.

Kornman, in his Treatise De Miraculis Mortuorum, relates the following Histories.

Saint Augustine from Saint Cirille informs us, that a Cardinal of the Name of Andrew having died at Rome in the Presence of several By-standers, was next Day conveyed to the Church, where the Pope and a Body of the Clergy attended the Funeral Service, in order to do Honour to his Memory: But to their great Surprize, after some Groans, he recovered his Life and Senses. This Event was at that Time looked upon as a Miracle, and ascribed to Saint Jerome, to whom the Cardinal was greatly attach'd.

The following Account seems more to refemble a Miracle, tho' we do not find that

it was looked upon as fuch.

Gocellinus, a young Man, and Nephew to one of the Archbishops of Cologne, falling into the Rhine, was not found for fifteen Days after; but was discovered to be

D 2

alive.

The UNCERTAINTY of alive, as he lay before the Shrine of Saint Suihert.

As an Excess of Credulity is unpardonable, especially in a Physician, so I am of Opinion, that there is nothing miraculous in these two Events; since we ought to suppose no Esfects preternatural, which can be produced by Physical Causes. Now the Histories before related give us just Reason to believe, that there was nothing miracu-

lous in these two Resurrections.

Kornman from Galen gives us two other Instances of the Uncertainty of the Signs of Death. The first is that of a Man seized with a Suffocation, which lasted for six Days, during the whole of which Time he continued without Eating or Drinking, and without any manifest Pulsation of his Arteries. The second is that of a certain Man, who happening to inter his Neighbour before seventy-two Hourrs from his supposed Death were expired, by that Precipitation proved his Murderer; since he was really alive when he was buried as dead.

After these and many other Observations of the same Nature, it is surprizing, that Kornman should be at a Loss to explain, how some dead Persons devour and swallow their Shrouds in their Graves, or how the Woman mentioned in Hondorss's Historical Theatre, devoured herself. It is certainly more reasonable to ascribe these shocking

Phenomena

Phenomena to the Despair natural to a Perfon interred alive, than with him to say,
That such Things cannot be accounted for; at
least, adds he, we must not with the Rabbins
suppose, that the Bodies of Men are the Prey
and Nourishment of the Serpent, or, to use
their own Words, of Azazeli, who is the
Master of Flesh and Blood, and whom God,
as we find in the Book of Genesis, has condemned to eat Dust all the Days of his Life.
It is true, that by espousing this whimsical
Notion, he would not have had an Opportunity of displaying his extensive Knowledge by proving that human Bodies are only Dust and Earth; a Proposition which no
Doubt called for an elaborate Dissertation,
in order to convince the Incredulous.

But as Distance of Time and Remoteness of Places are Circumstances which generally render Facts less striking and satisfactory, than otherwise they would be, we shall enumerate some Instances of the Uncertainty of the Signs of Death, which have happened in our own Times and in our own Coun-

try.

The first Example we shall mention of this Kind then, is that of a certain Canon of Bourges, who returning to Life whilst the Funeral Service was performing over him in the Metropolitan Church, was carried home to his own House, and perfectly cured of the Disorder, which was thought to have

D 3

cut

cut him off. He survived this Accident a long Time, and was promoted to be Official

of the Diocess of Paris.

The second Accident of this Nature happened at Toulouse; for a Lady being interred in the Church of the Jacobines with a Diamond Ring on one of her Fingers, a Servant of her own Family, concealing himself in the Church, when Night came on, went down into the Vault in which the Coffin was laid; but upon opening the Coffin he found, that the Swelling of the Finger hindered the Ring from flipping eafily off, for which Reason he began to cut it. Upon this, the Pain extorting a Shriek from the supposed dead Lady, the Domestic was seized with such Terror and Consternation, that he fell into a Deliquium. The Lady in the mean Time continuing to bewail her wretched Situation, till the Hour appointed for Morning Prayers arrived, was luckily overheard by some devout Persons, who, guided by the Voice, descended into the Vault, where they found the Lady fitting on a Seat, and the Domestic lying by her halfdead. Upon this they run forthwith to awake the Husband, who ordered her to be brought home, where she perfectly recovered from her Disorder. The Indisposition however of the Servant was so violent, that he could not be recalled to Life, but died in in twenty-four Hours after having accident-

ally preserved the Life of his Mistress.

This is not the fingle Instance of precipitate Interments, which have happened in the Town of Toulouse; for I have in my own Possession the following Certificate, wrote and figned by Mr. Blau, a Native of Auvergne, and a Man of untainted Veracity.

I hereto subscribing declare, that fiftyfive Years ago, happening to reside at

· Toulouse for the fake of my Studies, and

going to St. Stephen's Church to hear a Sermon, I saw a Corpse brought thither in order to be interred: The Ceremony

6 however was delayed till the Sermon

fhould be over; but the supposed dead

Person being laid in a Chapel, and at-

tended by all the Mourners, about the Middle of the Sermon discovered mani-

fest Signs of Life; for which Reason he

was quickly conveyed back to his own

· House: So that from a Consideration of

· Circumstances it is sufficiently obvious,

that without the Intervention of the Ser-

o mon the Man had been interred alive.

Paris, April 27, 1740.

BLAU

Mr. Mozet, Letter-Founder in Paris, has given me an Account of the three following Accidents which happened at Rheims, the Place of his Nativity.

This Gentleman's Grandmother happening to be at her Prayers near the Coffin of one of her deceased Neighbours, heard a certain Noise, made, as she thought, by some Motion within the Coffin; upon which she told a Clergyman, that the Woman was not dead. The like Noise being heard by some other Persons, who had been informed of what Mrs. Mozet had said, the Coffin was opened, and the supposed dead Woman found alive. It is about seventy Years since

this Accident happened.

A young Girl, the Daughter of a Tradefman, of the Name of Gouge, being conveyed to God's Hospital, and supposed to be really cut off by the Disorder for which she was brought thither, happily discovered the Signs of Life at the very Time she was on the Bier destined for carrying her Body to the Grave. After this Accident, which happened about twenty-sive Years ago, she was not only cured of her Indisposition, but also entered into a Marriage State. This Fact can be as yet attested by her Sister, Jean Gouge, a Laundress in the Street called Arbaletre, in the Suburbs of Saint Marcel.

About thirty-eight Years ago, a Woollen Draper of the Name of Husson, having put his Son to a Nurse, who lived pretty near Rheims, was soon after surprized with the melancholy News of the Child's Death. But

as he was resolved to have the Evidence of his own Senses for a Fact in which he was so nearly interested, he made the best of his Way to the Place where his Son lay ready to be interred, and ordering the Cossin to be opened, found him not only alive, but also so vigorous, that he survived the Acci-

dent twenty Years.

Mr. Mozet also informed me, that other Accidents of the same Nature had happened at Rheims; and it must be owned, that the unaccountable Precipitation with which Interments are generally performed, renders what he faid more than probable. Now, if a Multiplicity of Instances evince, that many have had the good Fortune to escape being interred alive, it is justly to be sufpected, that a far greater Number have fallen Victims to a fatal Confinement in their Graves. But human Nature is such a Slave to Prejudice, and fo tied down by the Fetters of Custom, that it is highly difficult, if not absolutely impossible to put People on their Guard against such terrible Accidents, or to persuade those vested with public Authority to take proper Measures for preventing them.

The following Accidents happened at Paris, and are strong collateral Proofs of the Uncertainty of the Signs of Death. A Person of Distinction being seized with a Disorder which is daily cured, though it is

D 5 morta

mortal in its own Nature, but always difcovers approaching Death by previous Signs, was committed to the Care of a Physician of the Faculty, who at Night left his Patient in Danger, though not without Hopes of feeing him once more alive. Up-on his calling next Day, however, he was told that he was not only dead, but also laid out as fuch: The Physician, by no Means startled at this, affirmed, that it was absolutely impossible he could be dead, and accordingly ordered the Cloth with which his Face was covered, to be untied, and his Body to be laid in Bed, which Measures, in Conjunction with the Assistance of proper Remedies, justified the Assertion of the Physician, since the Patient not only recovered from the violent Syncope which had imposed on the By-standers, but also lived several Years after the Misfortune.

A Woman of the Name of Aubert, who lived in the Street called Chartiere, at the Image of St. Sebastian, happening to be excessively enraged at one of her Children, fell into a Syncope so profound, that she was not only thought dead, but also put in her Cossin, and laid before the Door of the House: A Woman of the Neighbourhood however, imagining it impossible that Aubert was really dead, prevailed upon the People of the Family to take the Cossin up Stairs again, and open it in the Presence

of a Physician and Surgeon, the latter of whom, as I am informed, was called Chauvet. Upon executing this Design, the Body of Aubert was found all over warm, and her Countenance of a fresh and blooming Colour: The Physician considering these Circumstances affirmed, that she had not been dead an Hour, and that probably her now irretrievable Fate might have been prevented by Venesection in the Beginning of her Syncope.

A Porter who lived in the Street des Lavandiers, falling fick, was conveyed to the Hôtel Dieu, where, being foon after taken for dead, he was laid in a Grave along with fome other Persons who had died in the same Hospital; but returning to Life about Eleven o'Clock at Night, he tore the Cloth with which his Face was covered, got out of his Grave, and knocked at the Porter's Lodge, where he readily found Admission.

Mrs. Langlois, Wife to an Engraver and Image-maker in Saint James's-Street, near the Street de la Parcheminerie, was laid out for dead, put in her Coffin, and conveyed to the Church: But during the Funeral Service some Persons perceiving a Motion in the Cossin, opened it, and sound the Woman not only alive, but so vigorous and strong, that she lived a long time after.

About twelve or thirteen Years ago, a poor Woman, who lived in the Street de Boucheries.

Boucheries, in the Suburbs of St. Germains, was taken for dead, and laid out as fuch, with a Wax-Candle lighted at her Feet, as is usual on the like Occasions. Some young Persons however happening to watch her, were fonder of diverting themselves than of bewailing the Death of their Acquaintance; accordingly, in the Course of their Mirth, they overturned the Wax-Candle on the Straw-bed on which the Woman lay: The Bed being dry, took fire so suddenly, that they could not preserve her from the Flames, the Violence of which extorted an hideous Shriek from her. We may readily suppose, that an Accident so unexpected, put an End to the Mirth of the young People, who all made their Escape in the best Manner they could: But some Persons hearing the repeated Shrieks of the Woman, came to her Assistance, snatched her from the Straw bed, stopt the Progress of the Burning, and put her in a Bed. She then complained of an excessive Cold; for her Misfortuue happened in Winter; but being duly warmed and properly treated, she recovered fo thoroughly, that she has brought feveral Children into the World fince her Refurrection.

Among the great Variety of Accidents of the like Nature that have happened in Great Britain, I shall only at present relate the following.

At

At Basingstoke in Hampshire, not many Years ago, a Gentlewoman of Character and Fortune was taken ill, and to all Appearance died, while her Husband was on a Journey to London. A Messenger was forthwith dispatched to the Gentleman who returned immediately, and ordered every thing for her decent Interment. Accordingly, on the third Day after her supposed Decease, she was buried in Holy Ghost Chapel at the Outside of the Town, in a Vault belonging to the Family, over which there is a School for poor Children, endowed by a charitable Gentleman in the Reign of Edward VI. It happened the next Day, that the Boys, while they were at Play, heard a Noise in the Vault, and one of them ran and told his Master, who not crediting what he faid, gave him a Box on the Ear, and fent him about his Business; but upon the other Boys coming with the same Story, his Curiofity was awakened, so that he sent immediately for the Sexton, and opened the Vault and the Lady's Coffin, where they found her just expiring. All possible Means were used to recover her to Life, but to no Purpose; for she in her Agony had bit the Nails off her Fingers, and tore her Face and Head to that Degree, that notwithstanding all the Care that was taken of her, she died in a few Hours in inexpressible Torment.

The following Story is related by one Mr. William Tossach, a Surgeon at a Place called Alloa in Scotland, which I shall give in his own Words, as the Reader may find them in the Edinburgh Medical Essays, Vol. w V. p. 605.

November 11th, 1732, early in the Morning, an usual Steam was observed to

come out of a Coal-pit in this Neighbour-

hood, belonging to the honourable Sir

John Schaw of Greenock, which the Peo-

of it, found to be the Smoak of Coals

that lay about ten Fathoms from the Bottom of the Pit, and were some Way or

other set on Fire in two Places. This

Pit, and all the others which had any

· Communication with it, were shut up

close, to smother the Flame, and conti-

nued thus shut till December 3d, when they were all opened. The one, where

the Fire had been, sent out a most nau-

feous Steam, fo that No-body could come

near it, except to the Windward. After

fome Hours the Colliers and others ven-

tured down by the Ladders into this Pit,

which was thirty-four Fathoms deep;

but foon came running up, all panting

and breathless; they that came latest, be-

ing fcarce able to speak so much as to tell

that one of their Number, James Blair,

was left dead.

Two Men who were no Colliers offered foon after to go down, and others, ani-mated by their Example, accompanied them, and brought up the poor Man by Head, Shoulders, Legs, or Arms; their Hurry was so great, they did not think how they carried him. When he came to the Mouth of the Pit, which was between half an Hour and three quarters after he had been left in the Bottom of it; two had him by the Arms, and two by the Feet, with his Back uppermost. I made them immediately fet him down at a little Distance from the Pit, turning him fupine. The Colour of the Skin of his Body was natural, except where it was covered with Coal-dust; his Eyes were staring open, and his Mouth was gaping wide; his Skin was cold; there was not the least Pulse in either Heart or Arteries, and not the least Breathing could be obferved: So that he was in all Appearance dead. I applied my Mouth close to his, and blowed my Breath as strong as I could, but having neglected to stop his Nostrils, all the Air came out at them; wherefore, taking hold of them with one Hand, and laying my other on his Breast at the left Pap, I blew again my Breath as strong as I could, raising his Chest fully with it, and immediately I felt six or seven very quick Beats of the Heart;

64 The Uncertainty of

Heart; his Thorax continued to play, and the Pulse was felt soon after in the Arteries. I then opened a Vein in his

Arm, which, after giving a small Jet,

fent out the Blood in Drops only, for a

quarter of an Hour, and then he bled freely. In the mean Time I caused him

to be pulled, pushed and rubbed, to affist

the Motion of his Blood as much as I

could, washed his Face and Temples with

Water, and rubbed Sal volatile on his

Nose and Lips. Though the Lungs con-

tinued to play, after I had first set them

in Motion, yet, for more than half an

Hour, it was only as a Pair of Bellows

would have done, that is, he did not fo

much as groan, and his Eyes and Mouth

remained both open.

After about an Hour he began to yawn, and to move his Eye-lids, Hands

and Feet; I then put Water, in which

I had dropt some Sal volatile into his

· Mouth, which he swallowed, and caused

him to be carried into a House hard-by,

where I fet him in a Chair reclining backward. In an Hour more he came

pretty well to his Senses, and could take

Drink, but knew nothing of all that had

happened after his lying down at the Foot

of the Ladders, till his awaking as it were

in the House.

· Within

Within four Hours he walked home, and in as many Days returned to his Work,

but complained for a Week or two of a

violent Pain in his Back, which I believe

was owing to the Way of carrying him up

out of the Pit.

Lady Schaw, Mr. Bruce of Kennet, and the Reverend Mr. Thomas Turner, and feveral other Gentlemen, with three or

four hundred People of the Neighbour-

hood, were Witnesses to what I have now

related.

I must submit to better Judges to deterimine whether the Experiment I made use in of was the Means of saving the Man's Life in on whom it was tried; it is at least very

fimple, and absolutely safe, and therefore there can be no Harm, if there is not an

· Advantage, in making it publick.

Dr. Cheyne, in his English Malady, p. 307, gives us the following surprizing and singular Case, which very well deserves a Place here, as it cannot fail of being very entertaining to the Reader. We shall make use of the Doctor's own Words.

Colonel Townshend, a Gentleman of excellent natural Parts, and of great Homour and Integrity, had for many Years been afflicted with a Nephritick Complaint, attended with constant Vomitings, which had made his Life painful and mise-

rable. During the whole Time of his Ill-

66 The UNCERTAINTY of e ness, he had observed the strictest Regimen, living on the softest Vegetables and ' lightest Animal Foods, drinking Asses ' Milk daily, even in the Camp; and for common Drink Bristol Water, which, the Summer before his Death, he had drank on the Spot. But his Illness in-' creafing, and his Strength decaying, he ' came from Bristol to Bath in a Litter, in · Autumn, and lay at the Bell-Inn. Dr. Baynard and I were called to him, and attended him twice a Day for about the Space of a Week, but his Vomitings continuing still incessant, and obstinate ae gainst all Remedies, we despaired of his Recovery. While he was in this Condition, he fent for us early one Morning; we waited on him, with Mr. Skrine his Apothecary; we found his Senses clear, and his Mind calm, his Nurse and several Servants were about him. He had made his Will, and fettled his Affairs. He told s us, he had fent for us to give him some · Account of an odd Sensation he had for fome Time observed and felt in himself; which was, that composing himself, he could die or expire when he pleased, and yet by an Effort, or some how, he could come to Life again; which it feems he had fometimes tried before he had fent for us. We heard this with Surprize; but as it was not to be accounted for from

from now common Principles, we could hardly believe the Fact as he related it, much less give any Account of it; unless he should please to make the Experiment before us, which we were unwilling he should do, lest in his weak Condition, he might carry it too far. He continued to talk very distinctly and sensibly above a quarter of an Hour about this (to him) furprizing Sensation, and infifted so much on our feeing the Trial made, that we were at last forced to comply. We all three felt his Pulse first: It was distinct, though small and thready; and his Heart had its usual Beating. He composed himself on his Back, and lay in a still Posture some Time; while I held his right Hand, Dr. Baynard laid his Hand on his Heart, and Mr. Skrine held a clean Looking-Glass to his Mouth. I found his Pulse fink gradually, till at last I could not feel any, by the most exact and nice Touch. Dr. Baynard could not feel the least Motion of his Heart, nor Mr. Skrine the least Soil of Breath on the bright Mirror he held to his Mouth; then each of us by Turns examined his Arm, Heart, and Breath, but could not by the nicest Scrutiny discover the least Symptom of Life in him. We reasoned a long Time about this odd Appearance

as well as we could, and all of us judging
it inexplicable and unaccountable; and
finding he still continued in that Condi-

tion, we began to conclude that he had indeed carried the Experiment too far, and at last were satisfied he was actually dead, and were just ready to leave him. 'This continued about half an Hour, by ' Nine o'Clock in the Morning, in Autumn. ' As we were going away, we observed ' fome Motion about the Body, and upon Examination, found his Pulse and the ' Motion of his Heart gradually returning: · He began to breathe gently and speak ' foftly: We were all astonished to the last Degree at this unexpected Change, and after some further Conversation with him, and among ourselves, went away fully fatisfied as to all the Particulars of this · Fact, but confounded and puzzled, and onot able to form any rational Scheme that might account for it. He afterwards called for his Attorney, added a ' Codicil to his Will, settled Legacies on his Servants, received the Sacrament, and calmly and composedly expired about five or fix o'Clock that Evening. Next Day he was opened, (as he had ordered;) his: Body was the foundest and best made I. had ever feen; his Lungs were fair, large and found, his Heart big and ftrong,

69 ftrong, and his Intestines sweet and clean; his Stomach was of a due Proportion, the Coats found and thick, and the villous Membrane quite entire. But when we came to examine the Kidneys, though the Left was perfectly found and of a just Size, the Right was about four Times as big, distended like a blown Bladder, and yielding as if full of Pap; he having often passed a wheyish Liquor after his Urine, during his Illness. Upon opening this Kidney, we found it quite full of a white chalky Matter, like Plaister of Paris, and all the fleshy Substance disfolved and worn away, by what I called a Nephritick Cancer. This had been the · Source of all his Mifery; and the fyme ptomatick Vomitings from the Irritation on the consentient Nerves, had quite ftarved and worn him down. I have narrated the Facts, as I saw and observed them deliberately and distinctly, and shall leave to the Philosophick Reader to make what Inferences he thinks fit; the Truth of the material Circumstances I will

warrant. Though I had resolved to confine myself to the Narratives hitherto related, yet the Singularity and Truth of the followng Histories, whose most effectial Circumtances I shall only recount, will sufficiently

Two Merchants living in the Street of Saint Honorius, were connected with each other by the most facred and inviolable Ties of Friendship, possessed of equal Fortunes, and concerned in the same Branch of Trade. The one had a Son, and the other a Daughter, nearly of the same Age. The first Sentiments which made the Daughter sensible that she was capable of Love, also convinced her that her Heart belonged to the Son, who in his Turn was no lefs attached to her This reciprocal Inclination was encouraged and kept up by frequent Visits, authorised by both Fathers, who with Pleasure observed the Dispositions of their Children exactly suited to the Intention they had of rendering them Husband. and Wife. Accordingly, a Marriage was: just about to be concluded between them, when a rich Collector of the King's Revenues made his Addresses to the young Lady as a Lover. The delusive Charms of a superior

71 perior Fortune soon induced her Parents to change their Resolution with respect to their Neighbour's Son; and the Lady's Averfion to her new Lover being furmounted by her filial Duty, she married the Collector, and, like a virtuous Woman, discharged the young Gentleman whom she loved from ever seei g her again. The Melan-choly brought on by an Engagement so fatal to her Happiness, threw her into a Disorder in which her Senses were so locked up, that she was taken for dead, and interred as fuch.

We may readily suppose that her first Lover was not the last Person who heard the melancholy Accounts of this Accident. But as he remembered that she had before peen seized with a violent Paroxysm of a Lethargy, he flattered himself that her late Misfortune might possibly be produced by he same Cause. This Opinion not only lleviated the Excess of his Sorrow, but, lso, induced him to bribe the Grave-Diger, by whose Assistance he raised her from er Tomb, and conveyed her to a proper hamber, where, by the Use of all the Exedients he could possibly imagine, he haply restored her to Life.

The Lady, probably, was in no small onsternation when she found herself in a ange House, saw her darling Lover siting her Bed, and heard the Detail of all that

had befallen her during her lethargic Paroxysm. It was no hard Task to make her 72 . entertain a grateful Sense of the Obligations she lay under to her Deliverer. The Love The had always bore him, proved a moving and pathetic Orator in his Behalf; fo that when she was perfectly recovered, she justly concluded that her Life belonged to him who had preferved it; and to convince him of her Affection, went along with him into England, where they lived for several Years, superlatively happy in all the tender Endearments of mutual Love.

About ten Years after, however, they went to Paris, where they lived without any Care to conceal themselves, because they imagined. that No-body could ever suspect what had happened. But as Fortune is too often ani implacable Enemy to the most sincere and rap urous Love, the Collector unluckily met: his Wife in a public Walk; where the Sight of her well-known Person made such a strong Impression on his Mind, that the Persuasion of her Death could not efface it: For this Reason, he not only accosted her, but also, notwithstanding the Discourse she used in order to impose upon him, parted from her fully perfuaded that she was the very Woman to whom he had been married, and for whose Death he had gone into Mourning.

As the whimfical Nature of this Even cloathed the Lady with a Set of Charms which which the Collector never before imagined her to be Mistress of, he not only discovered her Apartments at Paris, in Spite of all the Precautions she had taken to conceal herself, but also claimed her as his Spouse before the Court authorized to decide in similar Cases.

In vain did the Lover infift upon the Right he had to ber, resulting from the Care he had taken of ber. To no Purpole did he represent, that without the Measures taken by himself the Lady would have been rotting in her Grave; that his Adversary had renounced all Claim to her by ordering her to be interred; that he might justly be arraigned as a Murderer for not using the Precautions necessary to ascertain her Death, and a thousand other Reasons suggested by Love, which is always ingenious, where it is fincere. But perceiving that the Court was not like to prove favourable to him, he resolved not to stay for its Decision, and accordingly made his Escape along with the Lady to a foreign Climate, where their Love continued facred and entire till Death conveyed them to those happy Regions, where Love knows no End, and is confined within no Limits.

The following Accident, tho' accompanied with less affecting Circumstances, is yet an equally strong Proof of the Uncertainty of the Signs of Death, and equally E authentic;

authentic; for I have the Account of it from the before-quoted Mr. d'Egly, who has heard the greatest Part of it about thirty Times related by the very Woman to whom

it happened.

Mr. Devaux, a Master-Surgeon of Saint Cosme, who lives in Saint Antony's-Street, had in his Family two Servant-Maids, one of whom, called Mary Isabeau, was three Times carried from her home in order to be interred, and the third Time did not discover that she was alive, till the Bearers were letting her down into the Grave. The Habit, however, she had contracted of counterfeiting the State of the Dead, in order to impose on the Judgment of the Living, inspired her Friends and Acquaintance with so much Diffidence, that when she really died, they were unwilling to run the Risk of a fourth Mistake; for preventing which they kept her fix Days before they interred her.

Bhonius, in the first Dissertation of the

Appendix to his Treatife of the Reports concerning mortal Wounds, relates the two

following Facts.

In the Year 1619, a young Woman, who was no Model of Chastity, had the Misfortune to bring a Daughter into the World in a Meadow near Torgaw. In order to conceal the Infamy of her Character from the Public, she interred the Fruit of her Body alive: But the Judge being informed

formed of her Crime, ordered the Grave to be opened, where the Infant was found alive. This Fact is sufficiently vouched by the criminal Process raised against the Mother on that Account.

An Accident of a fimilar Nature happened in the Year 1674; for two young Persons, whose criminal Amours had rendered them the Parents of a Daughter, wrapt her up in Linen and Woollen Cloths, and interred her in a Pit about a Foot deep made in a Barn: After throwing a little Earth over the Body, they covered it with some Bottles of Oat-Straw, imagining that these Precautions were sufficient to secure the Honour of the Mother. But the flagrant Crime was foon discovered, and the Infant who had suffered so much from a false Point of Honour, raised alive, seven Hours after its Interment; by which unexpected Circumstance the Parents were freed at once from the Imputation of Murder, and the Punishment due to that barbarous Crime.

These inhuman Parents, who had, as they thought, exposed their own Offspring to inevitable Death, and consequently committed Murder, in the strictest Sense of the Word, ought no doubt to have fallen unlamented Victims to impartial Justice, and only owed their Lives to a Desect of Rigour, or rather a Want of Equity in the Laws of their Land.

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But as moral Reflexions do not belong to the Province of a Physician, I shall confine myself to the physical Consequences which may be justly drawn from these Histories.

From these Facts then, it is sufficiently obvious, that a Person may live for several Hours without Respiration, since in the second Accident the Infant was found alive feven Hours after its Interment. And tho' Bhonius does not specify how long the Infant mentioned in the first Narrative was confined to its Grave; yet it is highly probable, that it must have remained considerably longer in that wretched Situation, fince, before a Report could be given in, before the Judge could run thro' all the Formalities requisite on fuch Occasions, and before the necessary Searches could be made, more than feven Hours must necessarily have passed. And what renders this Conjecture still more probable, is, that by precipitating their Procedure, they could hardly suppose they could come in time enough to rescue the Infant from its Grave with any Degree of remaining Life. We have, therefore, just Reason to believe that the first Infant was interred longer than the fecond, and may confequently ask, why a Person may not live the double of that Time in the like Situation? Such a Progression would carry us farther. than we, perhaps, imagine; since the Conditions necessary to the Preservation of Life: are are hitherto a Mystery, which, for ought,

we know, will never be cleared up.

Numerous Histories of similar Resurrections might be collected: But either the Curious or Incredulous may, for their farther Satisfaction, have Recourse to the Medicinal Observations of Forestus, those of Amatus Lusitanus, the Chirurgical Observations of William Fabri, the Treatise of Levinus Lemnius on the fecret Miracles of Nature, the Observations of Schenkins, the Medico-Legal Questions of Peter Zacchias, Albertinus Bottonus's Treatise of the Disorders of Women, Terilli's Treatife on the Caufes of fudden Death, Lancisi's Treatise concerning sudden Deaths, and Kornmann's Treatise on the Miracles of the Dead: But tho' these Authors furnish us with a great Variety of the most palpable and flagrant Instances of the Uncertainty of the Signs of Death, yet I cannot help relating two Accidents which happened, the one to Vefalius, and the other of a nearly similar Nature to another celebrated Anatomist.

(2.) Andreas Vefalius, successively first Physician to Charles the Fifth, and his Son Philip the Second of Spain, being persuaded that a certain Spanish Gentleman, whom he had under his Management, was dead, ask'd Liberty of his Friends to lay his Body open. But his Request being granted, he had no sooner plung'd his Diffecting-Knife in the

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Body,

Body, than he observed the Signs of Life in it; nor could he be mistaken in this Conjecture, fince upon opening the Breast, he saw the Heart palpitating. The Friends of the Deceas'd, prompted by the Horror of the Accident, not only purfued Vefalius as a Murderer, but also accus'd him of Impiety before the Inquisition. As the Fact was notorious, the Judges of that unrelenting Tribunal inclined that he should suffer as a Murderer. By the Authority, however, or rather by the Intreaties of the King of Spain, he was rescued from the threatning Danger, on Condition he would expiate his Crime by undertaking a Voyage to the Holy Land. Upon the Death of Fallopius, the Senate of Venice invited him to succeed that great Anatomist. With this View he embarked, but was in his Voyage, thrown, by a violent Storm, into the Island of Zante, where having wandered fome Days in the Defarts, and suffered the last Extremities of Hunger, he at last died in a deplorable Manner for want of Relief, on the 15th of October 1564, and in the fifty-eighth Year of his Age.

The Account of the Accident which befell the other Anatomist, is taken from Te-

rilli, and runs thus.

A Lady of Distinction in Spain, being seized with an hysteric Suffocation, so violent, that she was thought irretrievably dead;

her Friends employ'd a celebrated Anatomist to lay open her Body, perhaps with a Defign to discover the Cause of her Death. Upon the fecond Stroke of the Knife she was rous'd from her Disorder, and discovered evident Signs of Life by her lamentable Shrieks, extorted by the fatal Instrument. This melancholy Spectacle struck the By-standers with so much Consternation and Horror, that the Anatomist, now no less condemn'd and abhorr'd, than before applauded and extoll'd, was forthwith oblig'd to quit not only the Town, but also the Province in which the guiltless Tragedy was acted. His Escape was necessary, not only to prevent the Reproaches with which he was loaded, but also to preserve his Life, now expos'd to Danger rather by his Misfortune than by his Fault. But though he quitted the now disagreeable Scene of the Accident, a groundless Remorse prey'd upon his Soul, till at last a fatal Melancholy put an End to a Life whose Calamities could only terminate with itself.

As Accidents of this Nature are not only melancholly in themselves, but also productive of the worst of Consequences to those in whose Hands they happen, so we cannot use too many Precautions in convincing ourselves of the Death of any Person, before we attempt the opening of his Body; for it is not to be supposed, that two so ce-

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lebrated

lebrated Anatomists as these now mentioned plunged their Knives in the Bodies of the supposed dead Persons without a sufficient previous Scrutiny; nor is it at all probable that Vesalius, who attended the Spanish Gentleman through all the Stages of his Disorder, wanted Reasons to believe him dead, both from the prognostic and diag-nostic Signs of that State; and if that great Man was imposed upon by these Signs, it is but modest and reasonable we should not confide too boldly in their Certainty. I shall not, however, derogate too much from these Signs, nor divest them of those Advantages which really belong to them. "I know, says Celsus, that if su-"ture Death is to be foretold by certain Signs, some may ask how it comes a-bout, that Patients given over as dead by their Physicians, sometimes recover, " and that some have even returned to Life

" in the very Time of their Funerals?"

Before I give a direct Answer to this Objection, it is proper to observe, that a Patient given over by his Physicians is only a Subject in whom is observed an unlucky Concurrence of the Signs, which prognosticate a quick approaching Death; for fo long as there are any Remains of Hope, it is not only the Duty, but also the Honour and Interest of the Physician, to afford his Affistance cheerfully. Celsus however fully answers answers the Objection in the following Manner:

" Medicine is a conjectural Art, and fuch is the Nature of Conjecture in general, that what succeeds most frequently, may . 66 33 yet prove fallacious in particular Instances. It is therefore by no Means reason-66 able absolutely to divest that of Credibili-66 66 ty, which hardly proves fallacious once in a thousand Times; since there is no 6.6 Comparison between the Success and the 66 Error. What I affert is not only appli-66 66 cable to the Signs of Death, but ought 66 also to extend to Marks and Prognostics 66 of the falutary Kind; for Hopes are 6.6 fometimes deceitful, and those Patients frequently die, for whose Lives the Phyfician would have answered in the Beginning of their Diforders."-But it is certain, (which ought to be carefully adverted to) that the Signs of Recovery or Death, are far more fallacious and defective in Acute,

It is not without Reason, that I intreat the Reader to pay a due Regard and Attention

than in Chronical Diforders *

* Acute Disorders are such as of their own Natures terminate speedily either in the Death or Recovery of the Patients, as Desluxions of the Breast, Pleurisies, and Small-Pox; whereas Chronical Disorders are such as of their own Natures continue a long Time on Account of the Obstinacy of their Causes, as a Dropsy, a Scurvy, and a Palfy.

tention to the Observations of Celsus; since the Patients whose Histories we have already related, may be faid to have been cut off by acute Disorders; for tho' some of them have been attacked by Difeases habitual, and consequently chronical of their own Natures, fuch as the Hysteric Suffocations; yet these Indispositions have Intermissions so perfect, or Remissions so considerable, that every one of their Paroxysms ought to be looked upon as a particular Disease, which, considered in this Point of Light, is certainly an acute Disorder. This Truth is so evident, that every one who has but the least Acquaintance with the Healing Art, makes an infinite Difference between these habitual Disorders which return by Paroxysms, and a Phthisis produced by an Ulcer of the Lungs, or a Dropsy brought on by an Obstruction of the Viscera. And a Person must even be a sagacious thinking Physician before he can know the Reason why these different Disorders are classed among those of the chronical Kind.

(3.) If Persons are rarely interr'd alive, they still more rarely have the good Fortune to be taken from their Graves before it is too late. But as Life is of inestimable Value, it is necessary we should propose the Measures proper for recalling to Life, or rather to a durable Life, those taken from their Graves, tho' during a whole Century, or a still longer

Tract

Tract of Time, we should only preserve a single Person, or tho' we should only be able by these Measures to prolong Life for some Hours; since judicious Persons are sensible, that a few Hours of additional Life are sometimes of the last Importance, both with respect to the Concerns of this World and that which is to come.

On Supposition then, that a Person was taken from the Grave, the Coffin, the Water, or from any other Situation in which the Defect of respirable Air should necessarily produce a Suffocation, it would be no better than murdering him, suddenly to expose him to the entire Action of the Atmosphere, for that Fluid entering precipitately into the Thorax, produces in the Vessels of the Lungs a Dilatation, which, instead of facilitating the Passage of the Blood through that Organ, produces a fresh Obstruction in it; because the Action of the Heart is not strong enough to surmount the Resistance which the Air makes to the Passage of the Blood: And this must the more inevitably happen, because the Lungs in such a State become flaccid, which is the unavoidable Fate of all Fibres deprived of the Influx of the Spirits, which necessarily depends on the free Passage of the Blood through the whole Body, and the Velocity of its circular Motion. The Precaution, therefore, mentioned by Pecklin, of wrapping Persons taken from

the Water in Blankets, is highly proper, and excellently suited not only to this Species of Suffocation, or Privation of Respiration, but also to all others, as is obvious from the Example of the Franciscan, whose Fate laid a Foundation for these Observations.

But it is not sufficient to guard such Perfons against the rude Impressions of the Air, since it is also requisite they should only be permitted the free Use of that Fluid by De-

grees.

As the Decrease of the Circulation is neceffarily succeeded by a proportionable Diminution of Heat, so it is justly to be expected, the Bodies of Persons suffocated, or deprived of Respiration, have lost the greatest Part of that Warmth, which is so necessary to the Support of Life: For this Reason it is absolutely necessary they should be warmed. But it would be equally pernicious suddenly to expose them at once to the Fire, or precipitately to exhibit Medicines, which by the Volatility of their Principles might produce a Rarefaction of the Blood. It is far more fafe and prudent to begin by gradually augmented Frictions of the Extremities with warm Cloths, than all at once to expose such Persons to the Fire, or call in the Affistance of volatile Medicines, both of which may be fafely though gradually used, when the Circulation is fo restored.

restored, that their bad Effects are no longer to be seared.

These Precautions are sounded on a physical Reason, which the sufficiently known to Physicians, may yet afford new Phasure and Entertainment to Readers of another Class.

The Blood of the Vena Cava discharges itself into the right Auricle of the Heart, whose Contraction forces it into the right Ventricle, which in its Turn contracting itfelf, propells the Blood into the pulmonary Artery. That these Operations may be performed, it is necessary the Quantity of Blood discharged into the right Auricle should not overpower its Action, that the contractile Force of the right Ventricle should be sufficient to propel the Blood into the pulmonary Artery, and that in this Artery there should be nothing to obstruct or oppose the Distribution of the Blood which ought to be made in it. Now, according to this Doctrine, the Contraction of the right Auricle and Ventricle are in such Cases extremely weakened, fince these Muscles partake of the Relaxation of all the System of the Fibres; and we have elsewhere shewn, that the Lungs are collaps'd, and confequently oppose the free Circulation of the Blood, or its free Distribution through themselves. If, therefore, in affording Affistance to Persons in this wretched Situation, we should precipitately

pitately convey too quick a Motion to the Blood, we should by that very Procedure produce invincible Obstacles to its Circulation, and confequently make the Means of recalling Life subservient to the Production of irretrievable Death; for the excessive Quantity of Blood which enters the right Auricle, will overpower and furmount the weak Force which refists it. Besides, though this Auricle had contractile Force enough to convey the Blood into the Heart; yet the Action of that Muscle will not be sufficient to propel the Blood into the Lungs, or at least to surmount the joint Resistance made by the collapsed State of the Lungs, and the Air compressing their Blood-Vessels. The Precautions, therefore, we have proposed, are not only highly proper and expedient, but also absolutely necessary and indispensible.

It is needless to observe, that when the Circulation begins to be carried on freely, we may reduce it to its natural State by means of Cordials and anti-apoplectic Remedies; though these, and especially the: latter, as having most Energy, ought to be used with the utmost Caution in the Beginning: Nay, I am of Opinion that the fafest Method is totally to abstain from the anti-apoplectic Medicines, and to begin with the mildest Cordials, whose most energetic Parts being diffolved in a large Quantity of

fome

fome proper Vehicle, may more infenfibly mix themselves with the Blood, and consequently produce their Effects more flowly. Tis, however, necessary to observe, that the same Danger is not to be dreaded from the external Use of the most efficacious Remedies. Thus we need not hesitate to apply Topics to the Temples, the Nostrils, the Wrists, the Pit of the Stomach, and all the Parts where the Arteries lying near the Surface of the Body, are expos'd to their Action and Influence: And, as the membranous Parts are none of the least considerable Instruments of the several Motions perform'd in the Body, a very particular Regard ought to be had to them. Frictions then of the Hands and Feet, as well as the Applications of spirituous Medicines to these Parts, are extremely useful; for though the Propriety of this Practice could not be shewn by Reasons drawn from Anatomy and Phyfiology, yet we might be convinc'd of it by the Observation of Mr. Deventer, who orders Frictions with Hair Brushes to be made on the Soles of the Feet of fuch new-born Children as discover no Signs of Life, in order to restore the Circulation of the Blood, which is the Foundation or first Beginning of it.

Mr. Deventer, 'tis true, does not in this Case advise the Application of spirituous Medicines to these Parts: But as every one knows.

knows that these Remedies, as well as all other Liquors, penetrate the Surface of the Body, and enter the Cavities of the Vessels, their external Application must necessarily produce a very happy Effect. Besides, this Method of using spirituous Medicines is of all others the safest, both because their Mixture with the Blood is not so quick as when they are exhibited internally, and because the Parts to which they are applied are most

remote from the Center.

When Persons are taken from the Water, it is almost the universal Practice to hang them by the Heels, in order, as it is pretended, to make them throw out the Water they have fwallowed: But this Method is not entirely useless, but also conduces very much to destroy the small Remains of Life which may possibly be left; for the Water fwallowed by a drowning Person descends into the Stomach, and not into the Cavity of the Thorax, as is obvious from laying open fuch Persons; so that the Water swallowed cannot prevent their Recovery. For the Truth of this I have the Evidence of my own Senses; since, being plunged under Water, I opened my Mouth three times for Air, and each time swallowed a Mouthful of Water, which produced no other Sensation than that excited by the Liquors which I commonly swallow; a manifest Proof that the former went the same Way with the lat-It ter.

It will possibly be objected, that this may happen so long as the Person retains a Sense of his State and Condition, tho' not afterwards. But as the Water is hindered from entering into the Arteria Trochea and Lungs by a mechanical Effort, in which Reason has no Share, so the Lungs may in this State be compared to an empty Bottle plunged in Water, into which the Fluid does not enter, because the Air it contains resists its Access; and this the rather happens, because the Motion of the Breast, destined to attack the Air, at that Time totally ceases, and consequently nothing forces the Water to enter and fill up its Place.

Thus, the Practice of hanging by the Heels is not only entirely useless, but also greatly conduces to destroy the Remains of Life, which may possibly be left; for by such a Suspension, the whole Column of Blood conveyed to the Heart by the inferior Vena Cava will necessarily press upon that conveyed by the superior Vena Cava, where the Blood being interrupted in its Course, regurgitates into the Jugular Veins, and confequently into the Head, where, by its Quantity and Weight, it retards the Motion of the Spirits, whose free Progress is absolutely necessary to restore the Circulation of the

Blood, on which Life depends.

It is also to be observed, that one of the most essicacious Expedients for restoring to

Life

Life such as have been hanged or suffocated, is to use Venesection without Delay, especially in the Parts most proper to relieve the Head, such as the Ankles for Instance, and the Jugular Veins. Mr. Sylva advises to the former, and Mr. Tralles to the latter: But I shall not give the Preference to one above the other, till my own Experience

shall authorize my Determination.

The Use of Venesection in such Cases must be sufficiently obvious to every one, who confiders that hanged Persons die of an Apoplexy of the bloody Kind, and not for want of Respiration, or as is commonly thought, on Account of a Repletion and choaking up of the Breaft by Blood; for when fuch Perfons are laid open, the Breast is found almost entirely void of Blood, and the Brain extremely inflamed, both which Phenomena are highly agreeable to the Laws of the Circulation; fince the Heart producing a Contraction of the internal and external Jugular Veins confequently hinders the Blood from descending, whilst at the same Time the strong Membranes of the Arteries conveying the Blood to the Head, hinder them from being equally compressed; so that the Blood continuing to ascend, without the Liberty of descending, must consequently be collected in too large a Quantity in the Brain, and there form an Apoplexy of the bloody Kind. The Breast, on the contrary, contains contains but little Blood, because the Air, whose Egress is hindered by the Rope, dilates itself so considerably, as to elevate the Ribs in a very perceptible Manner: Now this Air cannot dilate itself so strongly without at the same Time compressing the Membranes of the Pulmonary Vessels, which in Consequence of this Circumstance cannot

contain their usual Quantity of Blood.

(4.) Kirchman is of Opinion, that Celsus here speaks of a Treatise wrote by Democritus, and entitled, HEPI' "ANNOY, concerning the Want of Respiration. This Work was composed on Account of the Tale of a certain Woman, who returned to Life after having continued feven Days without the least Signs of it: Other Authors, such as Galen, Pliny, and Diogenes Laertius, ascribe the same Production to Heraclides of Pontus, who lived long after Democritus. But, without deciding this Controversy, it is certain, from the Treatise itself, that the Physicians of the earliest Ages knew, that there were Disorders which so locked up, or destroyed the external Senses, that the Patients labouring under them appeared to be dead. According to Mr. le Clerc, in his History of Medicine, " Diogenes Laertius informs us, that Empedocles was particularly admired for curing a Woman supposed to be dead, tho' that Philosopher frankly acknow-" ledged that her Disorder was only a Suf-« focation

" focation of the Matrix, to which he gave the Name *ATTYBE, a Greek Word, figni-

" fying without Respiration, and affirmed,

" that the Patient might live in that State

" for thirty Days."

Mr. le Clerc, in the Work already quoted, tells us, that "Heraclides of Pontus wrote" a Book concerning the Causes of Diseases, and another concerning the Disease in

which the Patient is without Respiration,

(περί τῆς ἀπιθ) in which he affirmed, that in
 this Diforder the Patient sometimes continued thirty Days without Respiration.

" tinued thirty Days without Respiration, fo that he appeared dead in every Re-

" spect, except the Corruption of the

" Body."

To these Authorities we may add that of Pliny, who, after mentioning the lamentable Fate of Aviola and Lamia, affirms, "That

" fuch is the Condition of Humanity, and fo uncertain the Judgment Men are capa-

" ble of forming of Things, that even Death

" itself is not to be trusted to."

Colerus, in Oeconom. Part VI. Lib. xviii. Cap. 113, observes, "That a Person as yet not really dead, may for a long Time remain apparently in that State, without discovering the least Signs of Life; and this has often happened in the Times of

"the Plague, when a great many Persons

"interred have returned to Life in their Graves. Authors also inform us, that

" the

"the like Accident frequently befalls Women feized with a Suffocation of the

" Matrix."

Forestus, in Obs. Med. L. xvii. Obs. 9. informs us, "That drowned Persons have returned to Life after remaining forty-eight Hours in the Water,; and sometimes Women buried during a Paroxysm of the Hysteric Passion, have returned to Life in their Graves; for which Reason it is forbidden by the Laws of some Coun-

" tries, to bury the Dead sooner than seven-

" ty-two Hours after their Death."

This Precaution of delaying the Interment of Persons thought to be dead till seventy-two Hours after their Deaths, is of a very ancient Date, since Dilberus, in Tom. I. Disput. Philol. observes, that Plato ordered the Bodies of the Dead to be kept till the third Day, in order to be satisfied of the Reality of the Death. Now, from the Histories already related, we may judge whether this Precaution, tho' more prudent than the Conduct of a great many others, is yet sufficient to ascertain the Death.

(5.) Tho' in this and some other Passages Mr. Winslow informs us, that we may thro' Inadvertence take those who are really dead to be alive; yet we are not for this Reason to run the Hazard of interring living Persons, through a culpable Precipitation; since

this

this very Error is a Reason sufficient to authorize Delay till all our Doubts are refolv'd. This Observation of Mr. Winslow is founded upon an History related by Lancist in Tr. de Morb, Subit. Lib. 1. Cap. 16. where that Author tells us, that a certain Physician of Rome, happening to be present when a Perfon of the highest Distinction at Court died suddenly, after Lancist had given him over, he, to the great Surprize of the whole Family, and especially of his Brother Physician, who could not enough admire his Folly, affirm'd that the dead Person was still alive, because his Pulse was perceptible. "The " ignorant Fool, continues Lancist, was not " fensible that the Pulsation he ascribed to " the dead Body, was only that of his own " Fingers, with which strongly pressing the Wrist of the dead Person, which was dry and lean, he hindered his own Blood, which was in an highly fervid State, from passing from his Arteries into his Veins, by which Means augmenting the Action of the Blood in the Extremities, he also increas'd the Pulsation of the Arteries lodg'd in them." Such a Blunder, as Lancist observes, must necessarily render the Healing Art contemptible in the Eyes of those who are not able to distinguish between her genuine and spurious Sons.

(6.) The Vibrations of the Arteries refemble those of the Strings of an Instru-

ment;

ment; the larger the String is, the more sensible its Vibrations are. The Stroke of the Bow on the largest String of a Violin renders its Vibrations not only perceptible by the Touch, but also visible by the Eye. And the Vibrations of the large Strings of the Counter-Basse are softrong, that Gloves are necessary in order to play upon that Instrument; whereas 'tis quite otherwise with the Treble Strings, especially of the Violin, where the short and slight Strokes of the Bow produce only a simple Undulation.

The Vibration, then, or Pulsation of an Artery, considerable for the Largeness of its Diameter, and consequently for the Thickness of its Membranes, is very sensible; whereas that of the arterial Extremities is almost entirely lost, and the Pulsation is felt in an intermediate Degree in the Middle of the Artery. Hence it follows, that the Vibrations of the carotid and crural Arteries must be stronger than those of the Artery lodg'd in the Wrist, that situated between the Thumb, and those called the temporal Arteries. The crural and carotid Arteries may therefore afford Signs of the Circulaion, when the others cease to furnish any Marks of it. For this Reason 'tis commony said, that the Pulse of dying Persons scends; for in this State, the Pulse of the Wrist is subject to the following Alterations, which I carefully observed in a Person near

Death. First I perceived a great deal of Frequence, tho' the Pulsations were distinguishable from each other. Soon after they became so quick, that it was an hard Task to find the Intervals between them, and at last a simple Undulation succeeded; which happening at a critical Hour for fick. Persons, induced me to prognosticate a quick: approaching Death, which, however, contrary to all Appearances, was deferred till! next Day, the Circulation being in some: Measure restor'd. In these Circumstances,, the Pulse whose Motion is almost insensible in the Wrist may be perceived, by ascend-ing along the Fore-Arm when the Artery is fo situated that it may be felt, or when the Extenuation of the Patient readily exposess it to the Touch. But it is to no Purpose to feek for the Pulse above the Flexure at the Elbow, fince the Artery is there too far from the Surface to render its Vibrations sensible. This Circumstance has, no doubt, laid an Foundation for a common, though erroneous Opinion, among the Vulgar, that when the Pulse ascends to the Flexure of the Elbow, the Patient is past Recovery. If this Doctrine is not univerfally true, it has at least some Foundation in Reason; fince 'tis certain from what has been faid, that the Circulation must be extremely languid when it is not perceived in an Artery

fo confiderable as that of the Arm at the Flexure of the Elbow.

But tho' the Motion of the Artery should not evince the Reality of the Circulation, yet we are not from the want of the former to infer the Non-existence of the latter, since all that Reason authorizes us to conclude, is, that the Vibrations of the Artery are perhaps become so short and slight that they escape the Touch. A Circumstance, which, though sufficient to evince a highly preternatural State, can never amount to an Infallible Proof of Death.

(7.) In this Passage, Mr. Winslow only speaks of that Respiration which is perform'd in the free or open Air. But besides the Histories related from Pechelin of two Persons, one of whom returned to Life after remaining fixteen Hours in the Water; and the other, after he had continued in it for at least forty-two Days, since Pechelin fays he was found in the feventh Week after he was drown'd; and besides the already quoted Observation of Forestus, with respect to Persons who have revived after they had been forty-eight Hours in the Water, Naturalists speak of celebrated Divers, who have remained a confiderable Time under Water without losing either their Life or their Vigour.

It would be a Task both curious and useful, to examine whether, and in what Manner Respiration has been carried on in these different Persons; or if it has not subsisted, how the Circulation has continued without:

its Assistance.

It has been always thought, that in such Cases Respiration is not quite lost, tho' there: is neither in the human Body, nor those of other Animals, any Organ adapted to attract and receive the Air, which is copiously mixed with the Water. It has therefore: been supposed, that the Circulation is in such Persons persormed in the same Manner it is in the Fœtus, which is, that the Blood! which enters the Right Auricle of the Heart: passes also in a great Measure through ani Aperture, which communicates between it: and the Left Auricle, whence it is convey'd! into the Left Ventricle; and that the remaining Blood of the Right Auricle, which has not pass'd thro' the Aperture of Com-munication, commonly called the Foramen ovale, is forced into the Right Ventricle, whence it is express'd into the Pulmonary Artery, which for want of Air, opposing itself to its Passage, forces it to take its Course into the Aorta, which is performed by Means of a Canal of Communication betweeen these two Vessels, commonly call'd. the Arterial Canal.

'Tis in vain to oppose this Dostrine, by saying that such a Circulation becomes impossible in Adults; because the Arterial Ca-

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nal is in them changed into a Ligament, and because the Valve which shuts the Foramen ovale adheres to its Margins; for we are here speaking of a preternatural State, at least with respect to Adults, or rather of an Exception from the general Rule. if it is true, that after the Birth of the Infant the Arterial Canal fo changes its Position, that its Orifice, which opens into the Pulmonary Artery becomes higher than it was before the Fœtus respired, because the Lungs, when dilated by the Air, draw that Orifice upwards, which is the Reason that the Blood enters no more into it, and that the Canal itself has its Sides so collaps'd and shrivel'd up, as to be changed into a Ligament: This is, no doubt, a considerable Objection against the Continuation of the Circulation in Adults in the same Manner it is performed in the Fœtus.

But the Difficulty is still greater, if the Remark of Mr. Chefelden on the Foramen ovale is true; for he affirms, that this Foramen is almost never open either in Adults or in amphibious Animals, and adds, "That if it was, it could never be of the same Use to these Animals under Water, as it is to the Fœtus in the Uterus, unless the Arterial Canal was also open." If we admit all these Principles, we must necessarily conclude, that a Person may for some Time live without Respiration. The Ex-

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ample of amphibious Animals which remain whole Days under Water, and consequently without Respiration, renders this Doctrine probable according to the Principles of Mr. Cheselden. From what has been said, we may in the second Place conclude, that the Way or Road of the Circulation in these Circumstances is as yet unknown, or that the Circulation may remain suspended without its being necessary that Death should follow.

Tis not, however, reasonable to conclude, from the Observations already made, that in no Adult the Circulation can be performed in the same Manner as in the Fœtus; for tho' it should be granted, that there is generally such a Change of Position in the Orifice of the Arterial Canal, which opens into the Pulmonary Artery; yet there may be Exceptions from this general Rule, and particular Instances are sufficient for our Purpose. Besides I see no Reason why, tho' the Arterial Canal should make an obtuse Angle with the Heart of an Adult, whereas it formed an acute Angle in the Fœtus, this Position of it should hinder the Blood, which finds a Difficulty in paffing thro' the Pulmonary Artery, from returning towards the Orifice of the Canal, fince this is the only Passage which presents itself, that of the Heart being closely shut up by

the Valves, which prevent the Return of the Blood.

It will, no doubt, be objected, that this Canal is generally changed into a Ligament by the Adherence of its Sides, in Confequence of which it becomes useless: But I answer, first, that I only contend for particular Exceptions from the ordinary Laws of Nature; and secondly, that I am as much authorized to believe that the Arterial Canal may remain open, as that the Navel-String continues in that State; and it is fufficiently known, that this Canal sometimes discharges a considerable Quantity of Blood, when it has the Misfortune to be wounded. Besides, it is not always candid to conclude the Non-existence of a thing, because we never saw it.

I am not certain, whether Mr. Chiselden is absolutely in the right, when he afferts, that tho' the Foramen ovale remain'd open in amphibious Animals, it would be of no Use to them, unless the Arterial Canal was also open; since it is sufficient for sustaining the Circulation, that the Foramen ovale allow a Part of the Blood conveyed into the Right Auricle to pass into the Lest Ventricle; for the Blood of the Right Ventricle may pass into the Lungs, and return to the Left Auricle. In order to establish this Afsertion in Opposition to Mr. Cheselden, I need only mention what he himself says of

the Blood of the Fætus, which is, that it passes into the Pulmonary Artery in a Quantity sufficient to keep its Vessels open. Now its cannot be supposed, that the Condition of as Person who has respired, is worse than that of a Fœtus; on the contrary, the Lungs off the former being always more dilated, fince they never totally discharge the Air aftern its first Entrance into them, must of course: afford a freer Passage for the Blood: Thiss will appear still more probable, if we ob-ferve that the Circulation becomes slow in Proportion as the Respiration is rendered! difficult; and perhaps from this Observation we may account for the Continuation off an insensible Perspiration, without having; Recourse either to the Arterial Canal or the: Foramen ovale.

(8) The Passage taken by Lancist, from the eighth Book of Quintilian, and quoted by Mr. Winflow, first induced me to read! various Treatises on the Funeral Ceremonies, not only of the Ancients, but also of different Nations among the Moderns, in order to know whether they used any Precautions to ascertain the Death of those supposed to be dead: and if they did, whatt these Precautions were. I shall therefore give an Abstract of what I have read in these Treatises; in the Execution of which Defign, if every thing faid has not a direct Relation to the present Subject, yet it will! not only amuse, but also instruct the Reader, and convince him of the Truth of what Quenstedt says, when he affirms, that with respect to the Manners and Times of Interment there are as many various Customs as there are Nations.

As no Principle in the human Breast is more prevalent and universal than the Love of Life, we might reasonably think, that Mankind would neglect no Methods of preserving that inestimable Treasure. But so inconsistent is human Nature with itself, that if we were to form an Estimate of things from the general Conduct, we should conclude Lise to be a mere Trifle not worth the keeping. This is so true, that a chimerical, and often a ridiculous Point of Honour, the most brutal and unmanly Pleasures, the most unaccountable and unreafonable Customs, and even the most despicable Things are preferred to Life, universally accounted the greatest of Blessings. But that we may not deviate from our Subject, we shall now briefly enumerate the Customs of various Nations with respect to Interments, after having observed, that in this Point the Greek Philosophers were of different Opinions; for Heraclitus, who maintained that every thing was made of Fire, ordered the Bodies of the Dead to be burn'd; Thales ordered them to be laid in the Earth, because every thing ought at last to F 4 return!

return to the universal Principle, which according to him was Water; and Democritus, who believed the Resurrection, ordered

them to be preserved in Honey.

The antient Persians used but sew Ceremonies on this Occasion; for as soon as any Person was thought dead, his Body was forthwith exposed as a Prey to the Mercy of ravenous Animals: And this Custom was held as facred as any peculiar to that People. When the Body was quickly devoured, it was accounted an honourable Circumstance for the furviving Family; whereas its long Continuance was thought to carry fomething infamous in it, since the Animals despised it so much that they would not feed upon it. This Custom, however, did not always subfist in *Persia*, since, in some Periods of Time, they interr'd the Bodies of their Dead, but never burnt them. *Cicero* informs us, that they covered their dead Bodies with a Crust of Wax; and 'tis sufficiently evident, that their Intention by this Practice was only to preserve themselves from being infected by the noxious Exhalations arising from them. It was for the same Reason, according to Herodotus, that the Scythians used the like Practice, and that the Æthiopians covered their dead Bodies with Plaister; for different Methods have been used in order to attain the same End. Thus Salt, Nitre, Cedar, Asphaltus, Honey, Myrrh,

Myrrh, and Baums, have been employed to the like Purposes; as also Quick-lime, which, according to Galen, in Tr. de Med. Simp. Facult. Lib. 9. dries very powerfully, without corroding when frequently wash'd.

As the modern *Persians* are *Mahometans*, they interr their Dead in their Mosques

without any remarkable Ceremonies.

As foon as any Person dies among the Turks, they wash his Body, shave off his Hairs, and wrap him up in a Sheet, soak'd first in Soap-water, and then in Rose-water. After this they lay him out at his full Length.

in a Bier, and interr him.

The Chinese also interr their Dead, after having put them in Cossins, and conveyed them to the Grave with lamentable Shrieks. But tho, as will afterwards appear, such Lamentations were in some Countries instituted with a political View; yet in China they seem only to be the natural Expressions of intense Grief and Sorrow.

The same may be said of the Custom of the Americans, whose Lamentations are extreme, when a young Person dies; moderate when one of a middle Age is cut off; and so transitory as hardly to testify the smallest Degree of Sorrow, when old Persons and the Williams of Degree of Persons and Persons

sons fall the Victims of Death.

The Inhabitants of Mexico and Mechuacan embalm'd and burnt the Bodies of their Dead, at least those of their Kings, whose F5 Funerals The UNCERTAINTY of

Funerals were performed with incredible Pomp and Solemnity. But I cannot determine whether their Method of Embalming was the fame with ours, or whether it refembled that of the *Hebrews*, which we shall afterwards describe.

The Inhabitants of Japan interr them with the most exalted Demonstrations of Joy and Satisfaction; and as they are thus transported to see their Friends released from Life, and set at Liberty from all its Miseries, 'tis by no means probable that they should use any Pains to recall to this World those whom they suppose Death has conveyed to the other.

The Inhabitants of Moldavia wash the Bodies of their Dead, and interr them with

great Lamentations.

Some Nations wash'd the Bodies of their Dead, probably with a View to the greater Decency and Cleanliness; tho, as will asterwards appear, other Countries used the same Practice with quite different Intentions.

The Inhabitants of Greenland have a mighty frugal Method of disposing of their Dead: for after dragging them out of the Caves in which the piercing Cold of the Climate obliges them to live, they expose them to be indurated by the Frost; a Method excellently calculated to destroy the small Degree of Life which may possibly remain

in a Body apparently dead. This Country must, no doubt, abound with Statues, tho?

not of the Colossal Kind.

Among the Tartars, the Methods of difposing of the Dead have been various at difserent Times, since, during one Period,
they hung up the Bodies upon Trees, in order to be rendered hard; and during another, eat them, at least such of them as
were far advanced in Years. But the most
common and universal Custom was to interr them. Among this People there was
no Distinction made, except with respect to
their Kings, whom they embalm'd in the

ordinary Manner:

The antient Inhabitants of the Balearian Islands, now called Majorca and Minorca, covered the Bodies of their Dead with an Heap of Stones. But this Ceremony was preceded by an Operation, which, according to the Method in which it was perform'd, might be useful either in ascertaining Death, or putting an infallible End to Life, if any Degree of it still remained. This Operation consisted in cutting the Body into small Portions, which were put into a large Pitcher. Now 'tis sufficiently obvious, that the Method of conducting this Operation rendered it irretrievably mortal, or proper to recall the Dead to Life; for if they begun by cutting off the Head, or by giving some Wound in itself mortal, Death

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was then the necessary Consequence; whereas the Operation, when gently begun on one of the Extremities, might by the Pain have recall'd the Person to Life, if he was not

totally dead.

The Massagetæ, Dervises, and Essedons eat the Flesh of their decrepit old Men along with Mutton. The Dervises strangled their Women, and interr'd them, after they were seventy Years of Age. The Essedons exposed the Bodies of such as died of any Diseases to the Mercy of ravenous Beasts. The Caspians did not embrue their Hands in the Blood of their Neighbours, but expofed Persons above seventy Years of Age to the wild Beasts of the Desarts. If a Transgression of the Laws of Truth is in any Case pardonable, the Concealment of Age was certainly excuseable in a Country whose Inhabitants were fo shock'd at the Infirmities of superannuated Nature, that they invented such barbarous Methods to preferve those they loved from them. These Cruelties recall to my Mind two Lines of the celebrated Corneille, when speaking of the Daughters of Pelias, whose Motives, however, were very different from those of the Caspians.

A Force de Pitié ces Filles inhumaines De leur Pere endormi vout épuiser les Veines.

The Hircanians kept Dogs for devouring their Dead, which were for that Reason called Sepulchral Dogs. The Iberians exposed the Bodies of the Dead to Vultures; and the Iclithiophagi, a People who lived on nothing but Fish, threw their Dead into the Lakes and Rivers; imagining that it was but equitable to restore them that Nourishment they had received from them; or perhaps they were induced to this Practice by the Hopes of rendering the Fish they were afterwards to use, fatter, and more fit for the Purposes either of Nourishment or Luxury. The Lotophagi threw their Dead into the Sea; but the Hyperboreans thinking it more noble to meet Death, than patiently to wait for his Attack, threw themselves headlong into the Sea when they were weary of Life. The Colchians us'd no Methods to abridge the Period of Life, which is generally thought too short already; but when it was ended, they shut up the Bodies of the Dead in Bags of Leather, which they hung upon the Trees.

I might here give an Account of the Funeral Ceremones us'd by a great many other Nations; but as the Authors I have consulted only inform us, that they either interred or burned the Bodies of their Dead, I shall proceed to speak of those Countries whose different Practices seem to have some Signatures or Traces of the Truth I intend

to establish; or at least appear calculated to guard against burying Persons as dead, be-

fore they are really deprived of Life.

The Method, then, of embalming used by the Egyptians, was a Kind of chirurgical Test, with respect to the State and Condition of the Person supposed to be dead; for they first opened the Abdomen, from which they took the Intestines; thence they ascended to the Thorax, which they also laid open, tho' without displacing its contained Viscera, which they only washed. Then, according to Muretus, they extracted the Brain, by means of an Instrument introduced thro' the Nose, and afterwards filled all the Cavities of the Body with Aromatics, more or less costly according to the Condition and Circumstances of the Family to which the Deceas'd belonged.

But notwithstanding the Authority of Muretus, it must be owned, that, considering the Consiguration of the Cranium, it is hard to conceive how the Substance of the Brain could be extracted from it in this Manner. The Persons employed in embalming, were by publick Authority appointed for that Purpose. But what is surprizing is, that it became customary to throw Stones at the Embalmer, as soon as his Work was over; which, if we may believe Muretus, was owing to the Horror with which the Bystanders were struck upon seeing this Species

of Cruelty exercised on their Friends and Relations.

If these Stones were thrown in earnest, we may justly suppose that it was no easy Matter to find Embalmers, fince 'tis far from being agreeable-to run a Risque of losing Life several Times a Day in the Difcharge of a Public Office. Besides, the Friends and Relations of the Deceas'd might have prevented this Sentiment of Horror, by absenting from the mournful Spectacle which produced it. But 'tis more probable, that the Custom of insulting the Embalmers arose not so much from a pretended Horror excited by an imaginary Piece of Cruelty, as from this Circumstance, that several Perfons supposed to be dead discovered Signs of Life under their Hands. And this Conjecture is strengthened by the same Muretus, who tells us, that Persons were embalmed as foon as they were thought to be really dead. But whether this Custom of Embalming proceeded from a Principle of Respect to the Deceas'd, or a Fund of Vanity in his surviving Friends, 'tis certain that it prevented the Interment of fuch as were alive, and render'd fuch Deaths as were before dubious, certain and unexceptionable.

The Inhabitants of Florida, perhaps, with as little Defign to afcertain Death, as the Egyptians, used a Method, which, though different

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different, was yet equally proper to discover the Truth: For, according to Muretus, as foon as any Person died in Florida his Body was exposed to a large Fire, and turned now and then from one Side to the other, in order to dry it; then they cloathed it in the richest Habits they could afford, and kept it, like a Piece of Statuary, in a Niche made for that Purpose in the Wall of the House.

Tho' this Custom, no doubt, proceeded from Tenderness and Respect, yet it is equally certain, that exposing the Body to the Fire was an infallible Method of discovering whether it had any Remains of Life in it or not.

The Funeral Ceremonies used in the Caribbee Islands are in a great Measure conformable to Reason: For they wash the dead Body, and after having put it into the fame Posture with that of an Infant in the Uterus, wrapt up in a Cloth, they then begin their Lamentations, which are intermixed with comical Discourses made to the dead Person. They talk to him of every Object or Circumstance which they suppose capable of making him in Love with Life; fuch as his Wife, his Children, his Riches, the Offices he bore, and the Veneration that was paid him; and each of these Details is followed by a Repetition of these Words, How comes it then that thou hast died? They

speak to him for Instance, according to Muretus, in the following Manner; "You could have lived very comfortably, fince " you wanted neither Manioc, nor Potatoes, co nor Bananoes, nor Ananas; How comes it then that you have died? You' was very considerable in the World, since every one both esteemed and honoured you; es How comes it then that you have died? "Your Relations carefs'd you, did all they could to preferve the Serenity of your Mind, and allowed you to want for nothing; How comes it then that you have died? You was necessary to your Country, you had signalized yourself in many Battles, and you was the Man who screen'd us from the Insults of our Enemies; How comes it then that you have died?" Thus they expostulate with the Dead, in a Strain fuited to his particular Situation and Character during Life.

When the Lamentations are over, they place the Body on a small Seat, in a Grave about four or five Feet deep, and for ten Days present Aliments to it, intreating it to eat; then, convinced that it would neither eat, nor return to Life, they for its Obstinacy throw the Victuals on its Head, and cover up the Grave.

'Tis certain, that it would be more reasonable to have the Body at home laid out at its full Length, than to huddle it up in a Grave; but notwithstanding this Over-sight, it is evident from the Practice of this People, that they wait so long before they cover the Body with Earth, expecting that it will return to Life, and this Expectation is undoubtedly founded upon Experience; since they have had Instances of Perfons recalled to Life by these Measures, which are still the less exceptionable, because Cold, which in some other Countries would prove mortal, is unknown in that Climate.

These Lamentations, as we shall shew when we come to speak of the Jews and Romans, are neither so unreasonable nor useless as some may imagine. But what is still more surprizing is, that according to Meletetus, quoted by Quenstedt, the antient Prussians used similar Lamentations; as also the Inhabitants of Servia, according to Busbeque, in the History of his Embassy into Turky. 'Tis certainly hard to determine, why Customs of so particular a Nature could prevail in Countries so distant and remote from each other, whilst the smallest Traces of them were not to be found in the adjacent Nations.

The Thracians, according to Herodotus, kept their Dead only for three Days, at the End of which Time they offered up Sacrifices of all Kinds, and, after bidding their last Adieu to the Deceased, either burned or

interred their Bodies.

According to Quenstedt, the antient Rusfians laid the Body of the dead Person naked on a Table, and wash'd it for an Hour with warm Water. Then they put it into a Bier, which was fet in the most public Room of the House. On the third Day they convey'd it to the Place of Interment, where the Bier being opened, the Women embraced the Body with great Lamentations. Then the Singers spent an Hour in shouting and making a Noise, in order to recall it to Life; after which it was let down into the Grave, and covered with Earth. So that this People used the Test of warm Water, that of Cries, and a reasonable Delay, before they proceeded to the Interment.

Quenstedt also informs us, that in a certain City of the East, called Sachion, the Inhabitants keep their Dead without Interment, sometimes for seven Days, sometimes for a Month, and sometimes for ten Months, in which Case they shut them up in Cossins, or Boxes, in order to prevent the disagreeable Smell which they would

otherwise diffuse.

Tho' the Funeral Ceremonies last mentioned seem to evince, that the People who used them intended, by their Means, to satisfy themselves of the Reality of Death, before they proceeded to Interment; yet I have endeavoured to discover whether the Practices of the most considerable Nations

contained any Scrutinies or Tests of a similar Nature. With this View I had recourse to the Laws and History of the Jews, but was greatly surprized to find only one Regulation with Respect to Interment, in the 21st Chapter of Deuteronomy, where the Jewish Legislator also orders Persons hang'd

to be buried the same Day.

'Tis hard to discover the Reasons why Moses is so silent with respect to the Funeral Ceremonies of his Country, that even fome of the Jews themselves find fault with their Law on this Account; for we cannot suppose that the Unerring Spirit by which Moses was guided, would have hrgot an Affair of fuch Importance as the Discovering whether Persons were really dead or not. We may therefore reasonably conclude, that the Funeral Ceremonies of the Jews, as hander down from Adam, were so perfect and unexceptionable, as to require no Reformation or Change.

Gierue and Quenstedt have, however, from the History of the Jews, collected the following Particulars with respect to the Fune-

ral Ceremonies of that People.

As foon as a Person was dead, they clos'd his Eyes, tied up his under Jaw with a Fillet, and cut off his Hairs, stopp'd the Orifices from which the Excrements are difcharged, washed the Body, perfumed it, wrapped wrapped it in a Shroud, and put it in a Bier.

Gierus observes, that it was the Office of the nearest Relation to shut the Eyes, which however, was thought Homicide when performed before the Person was certainly dead; because in Circumstances where Life depends on so little, the slightest Motion is sufficient to extinguish the small Remains of it.

We have already observed that they perfum'd the Bodies, but not embalm'd them, by which we mean an Operation in a great Measure similar to that we described when we were speaking of the Egyptians; whereas the embalming of the Jews was only an external Application of Perfumes. This is evident from John, Chap. xix. ver. 40. where 'tis said, They took the Body of Jesus and wound it in Linen Cloths, with the Spices, as the Manner of the Jews is to bury. Another equally strong Proof of this Truth may be drawn from the Words of our Saviour, recorded in Matthew, Chap. xxvi. ver. 12. For in that she hath poured this Ointment on my Body, she did it for my Burial. Now these Words would have been so far from being worthy of our Saviour, that they would have been direct Nonsense, if it had been customary for the Jews to embalm in our Manner.

The Shroud used by the Jews consisted

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of two Pieces, which is perhaps meant by St. John, when he fays, the Body of Jesus was wound in Linen Cloths. One of these: Pieces was a kind of Napkin, which covering the Face was tied behind. The other was employed in covering all the rest of the Body, after the Hands and Feett were secured by Fillets. This at least wass the Condition of Lazarus, according to the Account St. John gives us of his Resurrection. Father Calmet thinks, that the Bodies of the Dead were swaddled up almost in the same Manner Infants generally are: But he must have either mistaken this Passage, or else there must have been different Methods of interring the Dead among the Jews.

The Bier in which the Body was laid was not shut at the Top, as our Cossins are, as is obvious from the Resurrection of the Window of Naim's Son, recorded in the seventh. Chapter of Luke, where these Words occur and he came and touched the Bier, and they that bare him stood still. And he said, young Man, I say unto thee arise; and he that was

dead sat up, and began to speak.

Gierus and Calmet inform us, that the Body, before its Interment, lay for fome Days in the Porch, or Dining-Room of the House. According to Maretus, it was probably during this Time that great Lammentations were made, in which the Name

of the Deceased was intermixed with mournful Cries and Groans; and that the Family might receive some Comfort, and avoid the Sight of their dead Relation, Women were hir'd for this Purpose, and accompanied

with Players upon Instruments.

Mr. Boyer, Member of the Faculty at Paris, observes, in a Letter with which he favoured me, that such Lamentations are still used by the Eastern Jews, and even by the Greeks who embrace the Articles of the Greek Church. These People hire Women to weep and dance by Turns round the Body of the dead Person, whom they interrogated with respect to the Reasons he had for dying, fince he was in a happy Condition in this World. Mr. Boyer fays, he has often been a Spectator of those Ceremonies, and that they have frequently interrupted his Sleep, when any Person in his Neighbourhood died. But he does not mention the Number of Days they kept their Dead before Interment; nor is this Point determined either by Gierus or Calmet.

In order to satisfy myself with respect to this, I had recourse to the History of the Death and Resurrection of Lazarus, where we are told, That when Jesus came to his Relief, he found that he had lien in the Grave four Days already. Which Words, when compared with Martha's Answer to Jesus, Lord.

Lord, by this Time ke stinketh, for he hath, been dead four Days, induce the Commentators to affirm that he was buried the same:

Day on which he died.

On the Day appointed for the Interment, they took the Body on their Shoulders, and carried it out of the City in order to bury it, in the strict Sense of the Word, or too lay it in a Tomb, cut in a Rock. The Sepulchres of the Rich were at least of this Kind, as is obvious from the Accounts we have of the Cave which Abraham boughts of Ephron, and of the Tomb of Jesus Christ, which Joseph of Arimathea had ordered too be made for himself.

The Talmad regulates the Dimensions of these Caves, which were six Cubits broad, and sour in Depth, with seven or eight: Graves in the Bottom to contain as many

Bodies.

Hence, we have Reason to believe that: the Custom of washing and persuming the: Bodies of the Deceased among the Jews,, was instituted less for the Sake of the Dead, than for the Advantage of the Living; for as they kept the Bodies several Days before: Interment, the bad Smell would have either rendered this Ceremony impracticable, or the House contagious, without the Precaution of washing and persuming, since Judea; being a warm Country, the Bodies of the Dead must of Course have been much

sooner subject to Corruption than in colder Climates. As this was the Reason which determined the Greeks and Romans to practise these two Ceremonies, we have also Ground to believe that the Jews used them with the same View. The modern Jews are in this respect far more delicate than their Forefathers, since in the Water employed in washing the Dead they boil Chamomile, dried Rose-Leaves, and other aromatic Flowers.

'Tis also to be observed, that as their Biers were open, they were not attended with the same Inconveniencies which accompany our close Coffins, in which Persons alive, and in perfect Health, would be quickly suffocated; so that it can hardly be imagined that Patients supposed to be dead could recover Life in them.

When we come to treat of the Romans we shall consider the Funeral Lamentations of the Jews, and only here observe, that in the Tombs of this last mentioned People, the Dead, if they should happen to return to Life, run a smaller Hazard of being suffocated, than in our Graves; since theirs, at least such as were destined for Persons of Distinction, were large and spacious Caves. But of whatever Kind their Tombs were, there were no Hazards run, if they did not lay the Bodies in them till their disagreeable Smell

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Smell and Corruption had convinced them

of the Certainty of their Death.

The Examples of some Romans burnedle alive, notwithstanding all the Precautionss taken by that People, are hard to be accounted for.

Lanzoni, a Physician of Ferrara, informs us, that when any Person died among the Romans, his nearest Relations clos'd his Eyes and Mouth; and when they saw him ready to expire, they catched his last Words and Sighs. Then calling him aloud three Times by his Name, they bid him an eternal Adieu. This Ceremony of calling the dying Person by his Name, was called Conclamation.

The Custom of Conclamation was of a Date prior to the Foundation of Rome, and was only abolished with Paganism, under which it was generally and religiously observed. Servius, in his Commentary on Virgil, tells us, "That the Romans were " fo punctual in this Affair, that if any " Person died out of his own House, they " forthwith conveyed him thither, that "they might have the Liberty and Conve-" nience of performing so essential a Piece of Duty to the Dead." But what more effectually proves the inviolable Attachment of the Romans to this Ceremony, is the extravagant and foolish Rigour with which they observed it; fince they used it intheir Houses

Houses with respect to those Persons, who

had died in foreign Countries.

Propertius acquaints us with the Effect they expected from this first Conclamation; fince there were several of them, as we shall afterwards see; for in Lib. IV. he introduces Cynthia as saying,

At mihi non oculos, quisquam inclamavit euntes; Unum impetrassem, te revocante, diem.

" No-body called me by my Name at the Time my Eyes were closing, and I

" should have enjoyed an additional Day,

" if you had recalled me to Life."

I shall not pretend to determine either the Number or Form of the various Conclamations used: It appears from this Passage of Propertius, that the Poet only speaks of a Conclamation made by the Voice, at the Time the Soul was leaving the Body. But we may venture to affirm, that all the Conclamations were not made in the fame Manner, as is certain from a Piece of Statuary preserved among the Collection of Antiquities at the Louvre, which exactly represents what pass'd immediately after the Death of Persons of Distinction; and on which a Benedictine has wrote a curious Differtation, in a Work printed at Paris in 1739, and intitled, An Explication of re-G 2 markable

markable Monuments, relating to the Religion

of the most ancient People.

This curious Piece of Antiquity greatly illustrates our Subject, and represents a young Lady in a reclining Posture, with her Head supported on her Lest Hand, and her Neck and Bosom uncovered. At the Head of her Bed is a Child, represented as drowned in Tears, and retiring towards a Lady fitting in an Arm-Chair, with a Foot-stool before it. Behind this Lady is a Woman, who has just torn her Garments, and confequently has her Bofom and Arms bare, with a Bracelet on the Left Arm. Behind her is another Woman, who with an Air of Indifference feems to look on the Persons standing at the Foot of the Bed. Before this Woman is a Genius holding an inverted Flambeau. On the Right Hand of the Lady, feated in the Arm-Chair, is a Man founding a Trumpet. On the Right Side of the Bolster of the Bed, which pretty much refembles one of our Sopha's, is a Man founding a Horn. At the Middle of the Head-board of the Bed is a Child, whose forrowful Looks are fixed on the dead Lady. At one Extremity of the Head-board is a young Man, holding in one of his Hands a Box, whose quadrangular Lid or Covering terminates in a Point; at a little farther Distance are two other Men, whose Attitude represents them as

beholding the Whole with an Eye of Satisfaction. Opposite to the Head board is a Fire, on which is a Veffel whose Cover is almost concealed by the Steam arising from it. Under the Bod are the Slippers of the Deceased, and a Dog sitting on his Tail. The Statue thus described is explained in the

following Manner.

The Lady lying on the Bed, according to the Benedictine, is one who has just died. and I do not in the least doubt of the Truth of his Conjecture, though she rather resembles a Person fast asleep, than one who has just expired. But the Author is not accountable for the Faults of the Statuary; and the other Figures of the Piece sufficiently prove that the Woman is dead, fince it would not only be Folly, but even Madness, to found Trumpets and Horns in the Ears of a Person struggling with the Agonies of Death. The Neck and Breast are uncovered, that the Sound of the Instruments may make the greater Impression upon her, and more easily agitate the Parts fubservient to Life. The Child drowned in Tears, appears to be the Offspring of the Deceased; and the Lady sitting in the Arm-Chair with the Foot stool, her Mother. The Foot-stool and the Bracelet which the other Woman has on her left Arm, are Proofs that they were Women of Distinction. The Genius holding an inverted Flambeau, G3

Flambeau, represents Hymen, extinguishing the Marriage Torch. The two Men, one of whom founds the Trumpet, and the other the Horn, are two Servants of the Goddess Libitina, hired to make the Conclamations with the Sound of Instruments. He who holds the Box is another Officer of Libitina, and the Box contains the Perfumes they are about to use. The two other Men are Funeral Officers, perhaps Perfumers, who with an Air of Satisfaction wait till the Conclamations are over, that they may wash and perfume the Body. The Vessel from which the copious Stream arises, is that in which they boiled the Water de-

stined for washing the Deceased.

The only Observations relative to our Subject made by the Benedictine, are, ist. That the Persons who performed the Conclamations with Trumpets and Horns put themselves in such a Posture, that the Sound of these Instruments might act-upon the Head, enter the Ears, and perhaps penetrate into all the Cavities of the Body, to which, as the Antients imagined, the Soul might possibly make her Retreat. 2d. That it was for the same Reason they uncovered the Neck and Breast of those over whom the Conclamations were performed with Instruments. 3d. That there was sometimes an Interval between the Death and the Conclamation, 4th. That the first Conclamation was made immediately after the Death, and the last immediately before the Body was listed in order to be interred: And 5th. That they frequently repeated the Conclamations during the Time they kept the Bo-

dy in the House.

That the Romans sometimes performed the Conclamations by means of Instruments, is certain from a Passage of Petronius, who informs us, that one Trimalcion being intoxicated with Drink, ordered the Servants of Libitina to be brought; and laying himfelf on a Bed, as if he was dead, ordered them to play fomething that was pretty. Upon this one of them founded his Horn fo strong, that he not only alarmed all the Neighbourhood, but also' brought the Guard about the House. This, therefore, is a Species of Conclamation not performed by the Voice; and besides that, there is not in this Piece of Statuary the least Mark of Conclamation by the Voice; It is certain that the Voice could have produced no Effects, being drowned by the shrill and penetrating Sounds of the two Instruments.

It is pretty probable, that this fecond Kind of Conclamation is even of a Date prior to the other, as may be naturally deduced from the Passage quoted by the Benedictine from Hyginus; who, in order to prove the Antiquity of Conclamation, derives its Original from Tyrrhenus, the Son

of Hercules, who, when he came to reside in Etruria, invented the Trumpet; for as the primitive Inhabitants of that Country imagined that he and his Companions eat Men's Flesh, he assembled them by the Sound of a Trumpet, in order to shew them that one of his Companions who had died, was interred, and not eaten. "Since which

"Time, continues Hyginus, the Romans, · in Imitation of Tyrrhenus, have always

" used the Custom of sounding the Trum-

" pet when any one dies, and by that Means affembling his Friends, that they

e may be convinced that he was neither " killed nor poisoned."

After a Person had expired, his Body was taken out of the Bed, and washed with warm Water by the nearest Relations or Friends. This is very naturally accounted for by Quenstedt and Caspar Bartbius, who in Advers. Lib. 37 Ch. 17. tells us, "That it was customary among the Antients to wash the Podies of their Dead in warm

Water, before they burned them, that the Heat of the Water might rouse the se languid Principle of Life which might

possibly be left in the Body."

By warm Water we are to understand boiling Water, as is obvious from the copious Steam arifing from the Vessel reprefented in the Piece of Statuary already ex-

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plained,

plained, as also from the two following Lines of the Sixth Book of Virgil's Aneid:

Pars calidos latices, & abena undantia flmamis Expediunt, corpusq; lavant frigentis, & ungunt

"Some of the Companions of Æneas with boiling Water taken from Brasen Vessels, wash the dead Body, and then anoint it." This is also one of the chirurgical Tests recommended by Mr Winslow. But it appears from the Conduct of the Romans that they reposed no more Considence in it than he, however efficacious it may be for exciting the Signs of Life in Persons who have any Remains of it; since they kept the Bodies of their Dead for several Days, lest thro' Precipitation they should interr them with any Remains of Life.

After the Body was washed, it was perfumed with precious Essences, which, according to Arnobius, were not spared on such Occasions; since in speaking of a Corps, he tells us that it was Opobalsamo udum, moist with Opobalsam. Kirchman informs us, that "The Design of this Pra-" Etice was to prevent the disagreeable Smell

arising from the Corps."

After the Body was anointed, it was cloathed with the Toga, if the Person was only a Citizen: but with the Pretexta, or Robe of State, if he bore any Office.

When

When the Body was cloathed, it was laid in a Chamber, where it was kept for seven Days: And as the disagreeable Smell of the Corps must have been more than a Ballance for the grateful Odour of the Persumes with which it was rubb d, they erected at the Foot of the Bed, a Kind of small Altar, which they called Acerra, and on which they continually burned Persumes, for sear of disgusting or incommoding those who approached to the Corps, the Design of which we shall afterwards shew.

This Custom is, perhaps, the Origin of our Beds of State, on which Persons of Distinction are laid. But surely they are degenerated from their original Institution, since generally the Body is not laid upon them till it is embalmed in the ordinary Manner; so that it is now only Pride which

supports this Custom.

The Romans, as Lanzoni informs us, kept the Bodies of the Dead feven Days before they interred them: And Servius, in his Commentary on Virgil, tells us "That on the eighth Day they burned the Body, and on the ninth put its Ashes in the Grave." They therefore kept the Bodies seven Days, and it is probable, that they did not before next Day put the sepulchral Urn into the Grave, since the Funeral Convoys were made in the Night, and since a considerable Time was requisite to separate

the

the Ashes, and prepare them according to the usual Method.

Polydorus in Tr. de Rer. Invent. Lib. 6. Cap. 10. and Alexander ab Alexandro in Dier. Genial. Lib. 3. Cap. 7. are also of Opinion that the Romans kept their Dead feven Days: And Gierus affirms, that they fometimes did not bury them till the Ninth. But Quenstedt fays, that he could adduce a great many Arguments to prove that they had not always a fixed Number of Days for this Purpose. Without the Force, however, of these Proofs, I can easily induce myself to believe that they deviated from the most universal Custom, when evident and incontestable Marks of Death rendered it safe to interr before the usual Time. Alexander ab Alexandro also obferves, that it was customary among the Greeks to keep the Bodies of their Dead feven Days before they put them on the Funeral Pile; and it was, no doubt, for this Reason that they perfumed them, as appears from the Accident which happened to Asclepiades, and which we have already related.

It would have, perhaps, been sufficient, to have kept the Bodies of the Dead seven or nine Days, or till Putresaction evinced the Certainty of Death; but the Romans carried their Circumspection farther, since, to use the Words of Quenstedt, "Those

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"who were employed in watching the Dead, now and then began their Conciderations, and all at once, called the dead Person aloud by his Name;" because, as Celsus informs us in the Presace to his first Book, "The Principle of Life is often thought to have left the Body when it still remains in it; for which Reason Conclamations were made, in order, if possible, to rouse and excite it." Father Pomey informs us, that the Romans now and then threw cold Water on the Faces of their dead Bodies; and every one knows what happy Effects such a Practice

produces on Persons in a Deliquium.

All these Measures proving ineffectual, they crowned the Dead with Flowers, and laid him in the Porch of the House, with his Feet towards the Door, where he remained till Night, the Time generally destined for Interment. Then after the last Conclamation, by Quintilian called the Conclamata Suprema, and to which Terence alludes in the Words, Desine, jam conclamatum est; "Give over, the Conclamation is now made," the Recovery of the dead Person to Life being despaired of, his Body is either interred or burned; for the Romans had their Choice of these two Methods of Burial, the latter of which, according to Pliny, was not of a very antient Date; and the Reason he gives for this Change of Institution,

stitution, is, that Persons who died when waging War in foreign Countries, were raised after their Interment. But in his Hist. Nat. Lib. 7. he tells us, "That a great " Number of Roman Families followed the " antient Custom, such as the Cornelian Family, for Instance, no Branch of which was burned before Sylla the Dictator, who chose this Method, lest his own Bo-" dy should be treated in the same Manner " he had done that of Caius Marius, which he ordered to be raifed from the Grave." Cicero also informs us, that Sylla was the first of the Cornelian Family who was burn-

It is surprising that Kirchman should, from a Law enacted by Numa, forbidding to sprinkle the Funeral Piles with Wine, find Fault with Pliny for afferting, That the Custom of burning the Dead among the Romans, was but a new Institution made in his own Time: For it is by no means to be fupposed, that Kirchman was better acquainted with the State of Rome than a celebrated Author of that Nation, who lived fifteen Centuries before him. All that can be reasonably inferred from the Law of Numa is, that Wine should not be wasted in Burials, if the Custom of the Greeks, who long before that burned the Bodies of their Dead, Pould ever happen to prevail in Rome; and perhaps this Law was founded

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on what Numa himself had sometimes seen practiced. But these Examples may be looked upon as Deviations from the general Custom, and Pliny's Authority must in this Case be more depended on than Kirchman's.

Some of the Roman Customs, as well as their original Laws, were, no doubt, borrowed from the Greeks, who at first interred their Dead, but in Process of Time burned them. The Origin of this Custom, according to Kirchman, was the Subtilty of Hercules, who having fworn to Lycimnius to fend back his Son Arnæus, whom he took with him to befiege Troy on Account of the Perfidy of Laomedon; that he might perform his Promise, ordered the young Prince to be burned, after he had been killed in Battle, and sent back his Ashes to the Father. It is by no Means surprizing to obferve, that Actions done without any Defign to establish future Customs, should yet produce that Effect, fince Novelty and a Love of Singularity are Motives which have in all Ages had a great Influence on Human Nature. But to return to the Funeral Ceremonies of the Romans.

During the Time the Body was conveying to the Grave, the Lamentations, Cries, Tears, and Mournings were redoubled, fo that the whole Company feemed to unite their Efforts, in order to recall the Dead to

Life, as is obvious from the Passage before quoted from Quintilian, relating to the Use of these Cries and Shrieks. It is not, therefore, fo much Lamentations, as the Excess and Indecency of them, or perhaps a Degree of Fury, which prompts Persons to kill themselves, or tear their Faces, that it is forbidden in the 34th Law of the Twelve Tables, in these Words: We forbid Women to tear their Faces, and make Lamentations at Funerals. For Quintilian not only mentions the Reasons and Advantages of this Custom, but it also appears that the Law relating to it was very ill obferved. Besides, this Law of the Twelve Tables, perhaps, extended only to the Women of the Family to which the Deceased belonged, and not to those who were hired to perform the Lamentations.

This Conjecture is rendered very probable by two Circumstances; the first of which is, that the Lamentations are forbidden to the same Women, who are ordered not to tear their Faces. Now, it is certain that this Prohibition extended only to the Women of the Family, and not to the hired Mourners, who were wifer than to disfigure themselves daily for those very Deaths by which they themselves lived. The second Circumstance confirming this Conjecture, is, that the Laws of the Twelve Tables were originally wrote in Greek. Now, if

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we may believe Quenstedt, Plato in his Republic condemned excessive Demonstrations of Grief; and Solon forbid the Athenians to use Lamentations, or any external Marks of Grief, since they were useless, and by no Means subservient to any Purpose in Life.

This is a full Detail at least of all the Roman Funeral Ceremonies relating to our Subject. I have endeavoured, but in vain, to discover, whether the Conclamations, the Cries when the Corps was carrying to the Grave, and the Precaution of keeping the Body for fo many Days, were prior or posterior to the deplorable Fates of Aviola and Lamia; for if they were prior, I should thence conclude that seven or nine Days are not fufficient to ascertain Death: And this would greatly confirm the Doctrine of Zacchias, and other Physicians, who affirm, that there is no infallible Sign of Death but a beginning Putrefaction. Besides, the before-mentioned Accident which happened to Asclepiades, and which is of a far older Date than that related by Pliny, evinces that the Greeks were sufficiently convinced of the Incertainty of those Signs which are commonly thought the Characteristicks of Death, even when they have subsisted for a considerable Number of Days successively.

But since the Signs of Death are so uncertain, that the most sagacious have often

been deceived by them, it is hard to give a Reason why the wife and reasonable Precautions of the Romans should be so much neglected among Christians: For if we look back into the Practice of the Primitive Church, we find but few Tests used in order to ascertain Death, since they only shut the Mouth and Eyes of the Deceased, embraced him, washed and perfumed his Body, and then put Cloths on it. After this, the Officers of the Church came and carried the Body, which was exposed for some Time at the Door, to the Place of Interment.

The Practice of washing the Body subfifted longer than any of the rest, since it was observed in the Time of Gregory of Tours. The Custom of perfuming the Dead has been abrogated ever fince, fo that we have now only faint Remains of it in

fome Popish Countries.

By our unaccountable Inclination to recede from the Customs of the Heathens, whether reasonable or not, we have also lost other Practices highly beneficial to Society. Baruffaldi greatly extols the Synodical Statures of Cardinal Laurentius Magalotti, Bishop of Ferrara, who thinks that "Ridi-" culous Mournings and effeminate Lamentations are unworthy of Christians, " and better become Heathens, who have " no Hope, and whose Practice of bewail-

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ing the Dead was so indecent, that they on not only run up and down the Streets like " mad Persons, but also hired Singers and "Mourners to honour those who were " dead, by feign'd and counterfitted Tears." It is however certain from what has been faid concerning these Customs of the Heathens, that they were wife Institutions, and fufficiently conform to the Laws of God and Man, which forbid Murder. But Cardinal Magalotti was no Antiquary, and which is still more, he not only misunderstood, but also applied a Text of St. Paul, who, in order to exhort the Thessalonians from grieving like those who had no Hope, tells them, That a Departure from this was a Passage into a far happier and more glorious Life: For, says he, in I Thess. Chap. 4 ver. 13. I would not have you to be ignorant, Brethren, concerning them which are asleep, that ye sorrow not as others which have no Hope. By which Words the Apostle Paul neither condemns that Grief, which Tenderness and Humanity authorise, nor the Precautions which the Fear of lofeing those whom we love may induce us to use, in order to ascertain their Death; since he only diffuades from that unreasonable and excessive Sorrow which results from the Thoughts of being for ever separated from those who are dear to us. So that this Pasfage only relates to a Grief similar to that

of the Sadducees, and some of the Heathens, who did not believe the Immortality of the Soul: For as the Apostle Paul, abstracting from his Inspiration, was well acquainted with Human Learning, it is by no means probable that he was ignorant of this, that the greatest Part of the Heathens expected to rejoin their Friends in the Elisian Fields, as we hope to see ours in Heaven.

The Custom of making Lamentations still prevails in *Picardy*, especially in the Country, where, when the Body is about to be carried to the Grave, all the Women embrace it, make terrible Lamentations, and call the deceased Person by his Name. Nor does this Practice proceed from a Principle of Humanity and Tenderness, since they set about it, without shedding a Tear, and personn the like Office to all dead Persons they have an Opportunity of seeing about to be carried to the Grave; and the only Reason they give for such a Conduct, is, that it is customary.

It is true, Interments are not made with fuch Precipitation and Hurry thro' all the Christian World, as they are in *Paris*, and the adjacent Towns, where it is common to interr the Dead before they have been

twenty-four Hours deprived of Life.

Mr. Winflow informs me, that in Denmark they do not bury their Dead till the fourth, or the End of the third Day, on account of

the Preparations requisite for the Interment. But as their Funeral Ceremonies are almost the same with those used at *Marseilles*, I shall for a Description of them, take the following Passage from the forementioned Letter wrote me by Mr. Boyer.

"At Marseilles, says he, we have pre-"ferved the Custom of washing dead Bo-

'dies, or at least their Face and Hands.
'As they are generally interred with the

"Face uncovered, we dress them according to their Rank and Dignity, or cloath

them with the peculiar Habits of the

Fraternities of Penitents in which they were enrolled; and these Habits are of

"different Colours, for the Sake of Diflinction. This Method is even used

with those who die of the Small Pox,

" unless they are very much disfigured.

But those who are cut off by malignant Fevers, especially in the Summer Time,

" are interred with the Face covered, and

without the usual Ceremonies. In Marse seilles we do not interr so precipitately as

at Paris, but leave the Corps in the Bed,

and under the Cloths, till the whole Function and Apparatus is prepared, which re-

quires several Days; for we cloath the

dead Persons with new Habits, the young

Women in white, the married in black, and the Men in Dresses suited to their re-

" spective Protessions.

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These Precautions and Ceremonies were not used in the Time of the last

Plague; for living Persons were hurried

to the Grave, and I myself have seen

fome of them return to their own

" Houses.

" In reading your Work continues Mr.

Boyer, I have observed some Affinity be-

"tween what is practifed in Paris in the

Winter,, and what you observe with respect to the Customs of some Nations

lying near the Poles; for as foon as any

Person is dead, or appears to be so, the

Windows are opened, and the Person is

laid out as soon as possible. To observe " the Expedition with which Servants and

" Officers fet about these Things, we

would be ready to conclude that they had a fingular Satisfaction in them, and

looked upon them as religious Duties

which could not be too foon performed.

So that I cannot help thinking with Mr.

Winslow and you, that at Paris, Inter-

ments are made with too great Precipita-

tion:"

The Christians, in Imitation of the Jews, have always interred their Dead. Minutius Felix, in his Apology for Christianity, informs us, that the Heathens upbraided and reproached us on Account of this Method of Burying, as if we were afraid of the Fire: But the Answer made by that Authoris

"That without any Dread of particular Methods of Burial, we adhere to the

" best and most antient Custom, which iss

" that of interring."

Those who want a more particular Account of the Funeral Ceremonies used in all! Ages, may consult Lanzoni's Treatise de Luctu Mortuali Veterum; that of Jeromi Baruffaldi de Præficis; that of Muretus concerning the Funeral Ceremonies of all Nations; that of Martinus Gierus de Ebræorumi Luctu, Lugentiumque Ritibus; that off Quenstedt, de Sepultura Veterum; that off Kirchman, de Funeribus Romanorum; thatt of Father Pomey, de Ritibus Funereis omnium Gentium; that of Panvinius, de Ritui Sepeliendi; Father Lamy's Commentary on: the Gospels; together with Calmet's History of the Bible, and Dissertation upon Church History.

If our Senses are so imperfect, that the Signs of Life may escape them; if the languid State of the sensitive Powers, or of the Origin of the Nerves, is such, that the most painful chirurgical Operations are sometimes insufficient to put the Spirits in Motion; if the Duration of a perfect Insensibility for a considerable Number of Days, are precarious and uncertain Marks; of Death; and if Situations, apparently the most inconsistent with Life, in which Persons have remained for a considerable:

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the Signs of Death. amount only to strong Presumptions that Life is destroyed, we ought, with Mr. Winflow, and a great many other celebrated Authors, to conclude, that a beginning Putrefaction is the only certain Sign of Death. Frederic Hoffman, in Patholog. Part I. Cap. 1. tells us, "That it is sometimes very dif-" ficult to distinguish such as are really " dead from those who are seized with a violent Syncope, because the alternate Motion of the Air which enters the "Thorax, and is discharged from it; as " also the Motion of the Heart and Arteries are so insensible, that they escape the most minute and careful Attention: "There are however various Signs of "Death—But the most certain and in-« fallible of these is, a beginning Putrefa-" ction." Which, as he afterwards ob-" ferves, "depends less on the Cessation of the various Motions of the Animal Ma-" chine, than on the long State of Rest in the Fluids, and the Action of a warm " and humid Atmosphere upon a Body al-" ready full of Moisture;" and whose Fluids, as appears from their Analysis, are composed of heterogeneous Principles, which consequently make a continual Effort to recede and separate from each other: For in order to preserve their Union, a Motion which continually presses them against each other is absolutely necessary. Besides,

their

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their most loose and disengaged Parts are continually making their Escape, and nothing is more susceptible of Corruption than the animal Fluids, which are destitute of that compressory Motion which produces

their Union and Connection.

To these Reflexions I shall only add, that the Certainty of Death arising from Putrefaction is in some measure cannonized by the Resurrection of Lazarus. Jesus, when going with his Apostles to Bethany, tells them that Lazarus was dead, and that he was: glad of this Opportunity of confirming their Belief in him as the Messias. For this Purpose he orders himself to be conducted to the Tomb where Lazarus had now been four Days. Martha, the Sister of the Deceased, with a seeming Design to diverti our Saviour from his Purpose, tells himi that the Body was already corrupted so ass to diffuse an ungrateful Smell; Lord, by this Time he stinketh. Now we cannot suppose that this Circumstance is related without some important Design: Jesus Christ wass sure of the Death of Lazarus; his Sister did not doubt of it; the Spectators were persuaded of it, and the Corruption of the Body rendered the Fact unquestionable. Our Saviour, therefore, in order to work as Miracle to which no Objections could be made, restores Life to a putrified and corrupted Carcass; by which Means Incredulity

145 lity is rendered inexcusable, and his Divine Mission attested by the most irrefragable Proof. The Force of this Miracle, though sufficient to gain the Assent of the most Incredulous, yet influenced the Jewish Doctors to take all the Measures they could to get rid of the Person who was able to work fuch Prodigies.

Having thus shewn that Putrefaction is the only infallible Sign of Death, I shall subjoin some Reflexions of the last Impor-

tance relating to the same Subject.

First, then, we ought to be very distident with respect to Deaths which have not been preceded by these Signs which are generally the Fore-runners of Death. Accidents of this Nature principally happen in all convulsive Disorders; such as Syncopes, and the Suffocations of hysteric and hypocondriac Patients, of those who are seized with violent Passions, or tormented with racking Pains, and in all the Diforders in which the nervous System is affected. The same holds true with respect to all sudden Discases, whether they proceed from an internal Cause, or an Apoplexy, or Catalepsy; or whether they are produced by external Accidents, such as Wounds, Falls, Contusions, or Suffocations occasioned either by a Compression of the Arteria Trachea, by Water, by continuing in a Place where there is not a due Quantity of Air, or whose Air 15

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is impregnated with noxious Vapours, or pernicious Exhalations, such as those of Charcoal, Narcotics, Arsenical Substances, Vitriolic Acids, and Fermenting Wine; for these Disorders, at least some of them, acting principally on the Nerves, may be justly classed among those of the convulsive

or nervous Kind.

Secondly, When Death is dubious, or as yet not fufficiently evinced by a beginning Putrefaction, its infallible Sign; we ought fo to treat the Body as not to hinder it from returning to Life, which would be the Consequence of laying it out in the usual Manner: Much less ought we, by a precipitate Interment, or shutting it up in a Cossin, to deprive it of any of the Means subservient to the Preservation of Life in general; such as a free Air, for Instance, since it is demonstrable that two hundred and fifty-two Paris Pints of Air are hardly sufficient to keep a Man alive for an Hour, fo quickly do the Vapours of Respiration corrupt the Air which furrounds us. It must be owned, that, as in the Cases we now consider, the Respiration is very languid, so the Danger arising from the Corruption of the Air must be proportionably less. But as a Ballance to this, it is to be observed, that there is but a very small Quantity of Air contained in a Cossin already nearly filled by the Body; and it is, no doubt for this Reason, that fome

some Joyners make Holes in the Tops of the Cossins, a Precaution which ought to be

always and universally taken.

Thirdly, We ought to be in a particular Manner diffident with respect to those Deaths which fucceed fuch Diseases as are not in their own Natures mortal, and which are easily distinguishable from less dangerous Disorders.

As we have already recommended a Diffidence with respect to all the Deaths which are not preceded by those Signs which are generally the Fore-runners of Death, it is but reasonable we should specify these Signs, in order to prevent Mistakes.

Every one, therefore, who has attentively observed Patients labouring under Disorders which terminated in Death. has perceived, that Medicines seemingly the most proper, have either proved prejudicial, produced no Effect at all, or only afforded a very transitory Relief; and each of these Cases is an

inauspicious and unlucky Sign.

According to Celsus, in Lib. 2. Cap. 6. the Signs of a quick approaching Death, or at least of a very dangerous Disease, are these following. The Nose is pinched, the Temples funk, the Eyes hollow, the Ears cold, the Skin of the Forehead hard and tense, and the Colour of the Face black, or extremely pale. Celsus, however, obferves, that these Signs are not absolute

H 2 Prognoftics

Prognostics of Death, except when they do not proceed from previous Watchings, from Fluxes, or from Hunger; in which Cases they only last for a Day. But if they are prolonged beyond the Time, the Prognostic is the same. If they continue for three Days in a Disorder of long standing, Death is not far off; especially if at the same Time the Patient can't endure the Light; if he sheds Tears; if the Whites of his Eyes become red, and the Veins dispersed through them pale; if the Liquor in the Eye adheres to its Angles; if one of the Eyes becomes smaller than the other; or if both of them become either hollow, or so inflated that the Eye-lids cannot touch each other during Sleep, but allow a small Portion of the White to be seen; if the Eye-lids, Lips, and Nose are pale; if the Eyes, the Nostrils, the Eye-lids, the Lips, the Eye-brows, or any of these Parts, are changed from their natural State; if the Weakness of the Patient is so great, that he neither hears nor fees; tho' at the fame Time too exquisite a Sense or Hearing, is also a very bad Sign.

Death is also prognosticated when the Patient lies on his Back, contracts his Knees, falls down to the Foot of the Bed, uncovers his Arms and Legs, and toffes them from one Part to another, has his Extremities cold, is continually asleep, and being seiz'd

with

with a Delirium, contrary to his Custom when in Health, has a Shattering of his Teeth; when an Ulcer formed before or during the Disorder, is dried up, or becomes livid; when the Nails and Fingers become pale; when the Breath is cold; when, in Fevers, any acute Disorders, Madness, Pains of the Lungs or Head, the Patient picks the Bed-cloaths, and pulls any Eminences off the Wall; when Pains which have attacked the inferior Extremities, and passed from thence to the Viscera, cease all of a sudden; when the Pain of inflamed Parts ceases all of a sudden; when without any Tumor a feverish Patient is suddenly fuffocated, or cannot swallow his Saliva, or has his Neck fo turned that he can swallow nothing; when the Fever is continual, and the Patient extremely weak; when in a Fever the Skin becomes cold, and the internal Parts are rendered so hot as to produce Thirst; when in a Fever a Difficulty of Breathing or a Delirium comes on, when Sleep augments the Pain, and when in the Beginning of the Disorder the Patient vomits or purges black Bile; when the like Evacuations happen after the Body is exhausted by a long continued Disease; when cold Sweats happen in acute Di seases, or when in any Disorder the Patient vomits Blood, or a mixed Substance of various Colours, and when the Urine is for a long H 3

Time aqueous, or becomes fo all of a fudden.

The greater Number of these Signs concurs, the more surely Death will be prognosticated. But we are with Celsus to observe, that these Signs are not absolutely infallible, and that they are more fallacious in acute than in Chronical Diseases.

These Signs are generally the Fore-runners of Death, because they proceed from an internal Inflammation, or Gangrene, or a convulsive Motion of the nervous and membranous Parts, which is soon succeeded by a Stoppage of the Circulation, and conse-

quently a Cessation of Life.

I intended to enlarge no farther on this Subject, my only Design being to apprize the Reader of the Danger to which he is continually exposed of being interred alive; a Danger not to be overlooked, fince nothing is less certain than Life, or more uncertain than the Signs of Death, at least fuch Symptoms as are commonly taken for Signs of Death. But that the Work may be the more perfect, I shall add some important Reflections on the Accident which befel Vesalius, and an Account of the Meafures most proper to be taken for the Relief of drowned Persons; and this Account, which was first published in 1740, has gained fuch a Reputation in the World, that it has been abridged by Mr. Reamur, inserted

inserted in the Memoirs de l'Acad. Royale, and by Mr. Argenson, first Minister of State to the King of France, distributed through all the Parts to which his Influence extended.

Mr. Winshow evidently proves, that the most cruel chirurgical Operations are sometimes insufficient to ascertain Death; and that Putrefaction is the only certain and in-

fallible Sign of it?

From these Principles I conclude,

Ist. That it is to no Purpose to use the

most cruel chirurgical Operations: And

2d. That it is necessary to abstain from such as may prove mortal to the Patient. Mr. Winslow is indeed so far from recommending Operations of this last-mentioned Kind, that he calls the plunging a long Needle under the Nail of an Apoplectic Patient's Toe, rash.

But if Mr. Winflow thinks it rash to make a simple Puncture in a nervous Part, we ought not surely to entertain a favourable Notion of the large and enormous Incisions

made in Diffections.

Those, indeed, who are dissected, run no Risque of being interred alive. The Operation is an infallible Means to secure them from so terrible a Fate. This is one Advantage which Persons dissected have over those who are, without any farther Ceremony, shut up in their Cossins.

H 3

As those who reflect upon the Accident which happened to Vefalius, that before related by Terilli, and another which lately happened in France, are sensible that these Antagonists did not perceive their Subjects were alive, till they had rendered it impoffible for them to escape Death; they must no doubt conclude that Diffections may

sometimes prove mortal.

Though it is not faid that the Woman mentioned by Terilli died of the Operation, yet this no doubt happened, because she discovered the Signs of Life at the second Stroke of the Knise. But it is very certain that she underwent an Operation, which was not only dangerons in its own Nature, but also which laid a Foundation for long continued subsequent Dressings, during which the Patient is continually exposed to fatal Accidents. In order to be convinced of this, no more is requisite than to consult fuch Authors as have wrote concerning the. Gastroraphy, or Suture of the Abdomen.

The two unfortunate Persons who are the Subjects of the other tmo Histories, were not so happy, fince they did not discover the Signs of Life till the Operation had rendered their Death infallible. These two In6ances sufficiently convince us of the Uncertainty of the Signs of Death, of the Insufficiency of chirurgical Tests, and their

Danger

Danger when mortal in their own Natures, and of the Possibility of such an Abolition of all the Senses as would not be credible, was it not confirmed by well attested In-Rances.

Hence it follows, that Persons in some Situations may suffer crucial Incisions thro the whole Extent of the Abdomen, without discovering any Signs of the remaining Principle of Life they have in them. Hence it also follows, that some Persons may, without the least Signs of Sensibility, suffer an Incision not only of the Abdomen, but also of the Teguments and Muscles which cover the Breast; of the Cartilages of the Ribs; of the intercostal Muscles; of the Pleura, that highly sensible Membrane which lines the Thorax, and even the Fracture of the Ribs, in order to discover the Heart.

The Historians, indeed, who relate the Accident which happened to Vesalius, do not inform us that he began his Operation on the Abdomen; but I have just Reason to believe that he did so; first, because he was passionately fond of Anatomy, and confequently cannot be supposed to have neglected any Opportunity of examining the State and Condition of the Abdominal Viscera: Secondly, because it was in his Time become customary to begin Dissections on the Abdomen, unless the Operator was absolutely

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folutely certain that nothing preternatural was to be found there: And, thirdly, because the Causes of the Disorder being unknown to that celebrated Physician, he cannot be presumed to have neglected the Examination of any Cavity of the Body in order to discover them. On which Supposition he must, no doubt, have begun by the Abdomen.

But granting that Vesalius began by opening the Breast, it is still certain that he could not discover the Heart without taking the Steps already mentioned; and the History informs us, that he was not apprized of the Patient's being alive, until the Palpitation of the Heart evinced that important Circumstance.

It would be frivolous to object, that in the History of Vesalius Embalming is not meant; for it is not the Intention of the Operator which constitutes the Temerity, but the Nature of the Operation, and the Circumstances in which it is performed. Besides, it is easy to shew that Embalming is still more inevitably mortal than the Operation performed by Vesalius.

For that Anatomist only made a simple Incision in the Abdomen, in order to examine its Viscera; whereas in Embalming, the Intessines are taken out, and the Arteries and Nerves cut in the Mesentery adhere to the

Border

Border of the Intestines; a Circumstance

which renders Death inevitable.

It may, perhaps, be said, that the Pain excited by the Wound inflicted in these Membranes and Nerves may discover the Signs of Life.

The Answer is easy: Perhaps such a Thing may happen, but it must necessarily happen too late; for Embalmings are not fet about with the same Precautions used in anatomical Dissections or chirurgical Operations. The sooner the Work is over the better. No Part is spared; the Knife and Bistery are used without Caution or Referve. But what is still more terrible is, that it is possible to make an Incision in the Mesentery, without rousing the Signs of Life; for it is certain that the Mesentery is much less sensible than the Pleura; and yet the Incision of the Pleura and Fracture of the Ribs, succeeded by a Dilaceration of that Membrane, much more painful than a fimple Incifion, did not produce the Signs of Life in the Patient, who died under the Hands of Vesalius.

The third Accident I mentioned, also

happened in Embalming.

It is therefore certain, that Embalming may prove insufficient to produce the Signs of Life in due Time to preserve the Patient; that a Surgeon cannot proceed to that Operation without Danger of murdering the Patient

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Patient, till he is absolutely certain of the Death; and that no one ought to attempt the Operation till the Signs of Putrefaction are evident, and consequently an Error is

rendered impossible.

Some Surgeons before they begin this Operation made Incisions in the Soles of the Feet; and their Intention is certainly laudable, fince by this Means they think to afcertain the Death of the Subject. But if, as Mr. Winflow judiciously observes, it is Rashness to plunge a long Needle under the Nail of the Toe, it certainly must be the Height of Madness to make deep aud long Incisions in these highly nervous and sensible Parts, especially since such a Procedure may after all prove insufficient to produce the Signs of Life; for to what Misfortune does not fuch an Incifion expose a Subject, as yet alive, and consequently capable of being cured. The most superficial Knowledge of Anatomy and Surgery is sufficient to evince this, so that we may justly conclude, that Embalming cannot be safely undertaken, till Putrefaction has fully ascertained Death.

MEASURES

To be taken for the Relief of those, who are thought to be drowned.

HAT in populous Towns, and even in less considerable Places, situated on the Banks of Rivers, some Persons have almost every Year the Missortune to be drowned, is a Truth not to be called in Question, but it is not equally known and believed, that many Persons taken out of the Water without any Appearance of Life, would be rescued from approaching Death, if, for a sufficient Time, the proper Means of Relief were afforded.

After some short Attempts, we continue to esteem as dead, those in whom all Appearance of Life seems to be extinguished, especially if they have remained for a considerable Time, a few Hours for Instance, in the Water; in which Case no Measures are taken for their Recovery. Histories,

How.

however, related by Authors worthy of Credit, sufficiently evince, that the Lives of Men who for feveral Hours have been not only in, but under Water, have been preserved, and that sometimes two Hours have elapsed, before there appeared any Sign that they were not really dead. The steep and dangerous Banks of some deep Lakes at Switzerland frequently occasion dismal Accidents of this Nature. The good Success of the Measures used for restoring such Perfons, fometimes sooner and somerimes later, have been published in the Swifs Mercury, and these Measures we shall here enumerate; fince it is to be wished that they were univerfally known, that they could be put in Practice on all Occasions that require them, and that in putting them in Practice, the World might discover Measures still more efficacious and intallible

Formerly it was thought the best and most expedient Thing that could be done, for the Recovery of the drowned Person, to hang him up by the Heels; but since, from the Dissections made by skilful Anatomists, it is certain, that drowned Persons have generally less Water in their Stomachs, than if they had voluntarily drank a considerable Quantity, it does not seem expedient to put the drowned Person in a Position, which would prove uneasy as soon as the Humours of the Body should resume their ordinary

ordinary Motion. It may however happen, that the Person may have swallowed too much Water; then, in order to know whether he has or not, and to make him vomit it up if he has, it is proper to put him into a Tun, open at both Ends, and which for somd Time is to be rolled backwards and forwards in different Directions. He may also be excited to vomit the Water by frequent introducing into the Œsophagus the bearded End of a Feather.

After taking off the Cloaths of the drowned Person, instead of letting him lie stretched and naked on the Shore, which is too often the Practice, we ought with the utmost Expedition to shelter him from the Impressions of the cold Air, and begin to warm him by wrapping him up with Cloaths and Coverings.

In order to warm him the more effectually, he is afterwards to be put into a Bed, the Clothes of which are pretty warm, applying also frequently to his Body hot Nap-

kins and Cloths.

There are Instances of drowned Persons, on whom the Instuences of a hot and scorching Sun, to which they have been exposed, have produced the same happy Effects, which the warm Clothes have upon others. Some have been warmed in hot Baths, but these are not on all Occasions to be had.

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The great Intention to be pursued is, to put the solid Parts of the Machine in Action, that thus they may restore the Motion of the Fluids. In order to answer this Intention, the drowned Person is not to be lest in Bed in a State of Rest, but agitated in an hundred different Manners, turned from one Position to another, lifted up and let fall, and shaked in various Directions in the Arms of Persons of Strength sufficient for that Purpose.

Spirituous Liquors ought also to be poured into his Mouth; and where these cannot be had, it is customary to pour warm Urine into it, which has been observed to produce happy Effects. Some prescribe a Decoction of Pepper and Vinegar to be used as a Gar-

garism.

We must also attempt to irritate the internal Fibres of the Nose, either by volatile Spirits, and the Liquors used in Apoplectic Cases, or by tickling the Nerves distributed to the Nostrils by the bearded Part of a Feather, or by blowing into the Nostrils thro' a Quill, Snuff, or some more powerful Sternutatory.

One of the Measures taken with such drowned Persons as have been restored to Life, has been by Means of a Quill, or small Pipe, to blow warm Air into their Mouths, that thus it might be conveyed into their Intestines; into which it has also

been successfully introduced by Means of a Pair of Bellows. For this Purpose we may also use a Syringe, which might perhaps be still employed to better Purpose, in injecting warm Clysters capable of irritating the Intestines, and producing more considerable Effects than the Air generally conveyed to them.

But perhaps the most efficacious Method that can be taken with a drowned Person, is by Means of a proper Pipe to blow the Smoke of Tobacco into his Intestines: There have been several Instances, at once of the speedy and happy Effects of this Smoke on drownd Persons*.

None of all these measures specified ought to be neglected, fince they may possibly concur

^{*} The celebrated Dr. Mead in his Mechanical Account of Poisons, after mentioning that many who have been drowned, and dead to all Appearance, have been furprifingly recovered to Life, fays, 'This should certainly incourage the Use of all Means upon such Accidents, especially fince the Trial is not difficult. The first Step should be, to blow up the Smoke of Tobacco into the Intestines; then to warm the Body by fhaking and rolling about, and rubbing it with warm Cloaths in Bed: In a Word, to put the Blood into Motion by all Manner of Ways; and not to be difcouraged, though no Signs of Life should be discovered after an Hour or two spent in this good Work: ' towards the latter End of which volatile Spirits and Salts may have a good Effect. Neither should Bleeding be omitted, when the Blood is become warm enough to drop out of the Veins.'

concur to produce an happy and falutary Effect; but they will prove most successul, when taken under the Management and Inspection of a judicious Physician. If a Surgeon can be had, Vanefection is by no Means to be neglected, and perhaps it is most commodiously instituted in the Jugular Vein; for in drowned Persons, as well as in those that are hanged, or seized with an Apoplectic Fir, the Veins of the Neck are too much diftended and choaked with Blood: Now if these Veins can happily be in some Measure emptied, they will be in a more proper Condition to act upon the Fluid they contain, and which, in order to restore the Patient, they ought to put in Motion.

When these Measures prove unsuccessful, the Surgeon's last Recourse is to Bronchotomy, or opening the Arteria Trachæa; for perhaps the Air entring freely into the Lungs, thro' the Aperture made in the Canal, thro' which they received it in their natural State, and the warm Air which may be blown thro' this Aperture, will restore the Playing of the Lungs and all the Motions of the Breaft.

But we must carefully advise all those who shall employ themselves in the humane and beneficent Office of restoring drowned Persons, not to be discouraged, if the first Appearances do not answer their Expectations; for it is certain from Experience, that fome drowned Persons have not begun to discover any Signs of Life, till they have been tossed about and tormented for more than two Hours. Besides, the Man who has succeeded in restoring to Life a Person, whose Death without his Assistance was certain, is sufficiently rewarded for his Pains by the Success; and if his Pains and Diligence should fail of their desired Essects, he will still receive an exalted Pleasure from a Reslection on his having acted with the most noble and generous Views.

That the Plan of Mr. Winflow and Dr. Brubier may want no Circumstance to render it perfect, we shall in the last Place observe, that Bronchotomy, tho' commonly looked upon as a formidable Operation, is yet of the last Importance for the Preservation of Life; since it is no less beneficial and effectual in Suffocations arising from Quinfeys and Inflammations of the Throat, than in those produced by Submersion, or what

we commonly call Drowning.

Thus the celebrated Heiser tells us, that if Persons drowned are already, tho' but just dead, their Aspera Arteria is to be open'd with all Expedition, either with an Inci-sion-Knife, or any other Instrument the Surgeon shall judge proper; then it is expedient to blow strongly into the Orifice made either with the Mouth, or by Means of a

Pipe, if any such thing is at hand, because in this Case above all others Delays are dangerous: For that justly celebrated Physician Dethardinguis, some time Professor of Physic at Rostock, now at Copenhagen, in'a Differtation on this very Subject, published not long ago, informs us, that by this Method, if speedily put in Execution, Life returns to the suffocated Patient together with the injected Air, and that he is in a Manner miraculously raised from the Dead. For this Reason, I think the Operation is not in Cases of this Nature to be neglected, but performed whenever the Opportunity offers, with all the Haste and Expedition imaginable.

I am sufficiently apprifed, that a great many Physicians forbid an Incision in the Aspera Arteria, and consequently condemn this Operation, because they think it productive of Death, and are therefore prompted by a foolish Zeal to brand their Fellow-Physicians, who attempt an Operation so dangerous in their Eyes, with the odious Appellations of barbarous and inhuman. But the Gentlemen who are of this narrow and confined Way of thinking, are grosly mistaken; since in this Operation the small Incisions made in the Aspera Arteria are so far from killing the Patient, that they do not even produce that Effect, when made confiderably large: For this Reason, we think

think ourselves justly authorized with Casse rius [in Trast. de Vocis Auditusque Organis] to pronounce those Surgeons unskilful, cowardly, and even cruel, who in Cases of this Nature foolishly neglecting the Operation, which is often fafe in itfelf, and attended with the most speedy and salutary Effects, suffer the Patients to die for want of this

proper and seasonable Assistance.

That the Surgeon may not therefore be at a Loss to perform his Duty, and afford Relief, and even fresh Life to those who are drowned, he may even perform this Operation in such of the following Methods as he shall judge most expedient, observing that the Part of the Trachæa most proper for the Aperture, is that situated between its second and third cartilaginous Annuli or Ringlets, tho' the Incision may be made a

little lower without any Danger.

1. First then, the Patient is to be placed in a reclining Posture, either in a Bed, or in some convenient Chair, and his Head is to be held firm by an Assistant standing behind his Back; then a longitudinal Incision thro' the Skin, Fat, and Muscles is to be made from about two Fingers Breadth below the Cartilago Thyroides, or Scutiformis, or the Pomum Adami in the Middle of the Trachæa down to the superior Part of the Sternum; fo that the Length of the Incision

may be equal to two or thre, or even in tall

Patients to four Fingers Breath.

Then an Affistant is carefully to draw the Lips of this Orifice from each other, either with proper Hooks or his Fingers; and haveing absorbed and wiped away the Blood, either by a Sponge or a Linen Cloth, so that the Aspera Arteria may be seen, three or four of the Ringlets of this Spiral are to be cut in such a Manner, as that the Incisions made in the whole may form one continued Line. This Method is but little used by modern Surgeons, and seems more proper to afford Relief, when a Bean, a Pea, a Cherry-Stone, or any other foreign Substance, falls into the Aspera Arteria, than to restore Life, when the Patient is suffocated, for want of Air, or by Means of Submersion or Drowning, in which Cases the following Methods are more expedient.

or Chair with his Head reclined at the Surgeon's Discretion, and held firm by an Assistant, as we have already said; then let the Surgeon make an Incision in that middle Part of the Throat, and in that Manner we have above directed, till he reaches the Trachea itself; or if it is thought proper, the Skin also on both sides may be laid hold of by the Surgeon and his Assistant; then it may be raised and cut longitudinally; after which, the Fat and Muscles lying above the Trachea

Trachea may be cut: Some would have these Musces previously disengaged and warily separated from the Trachea; but there is no Occasion for all this Labour, fince they may be cut safely and without any Danger. Then the Surgeon cleanses the Wound with a Sponge wrung out of warm Wine or Spirit of Wine, for the more effectual stopping of the Blood, and orders his Assistant to Separate and retract its Lips, either by Means of proper Hooks or his Fingers: Then he passes his Knife between two of the Ringlets of the Trachea, or he may even pass it in such a Manner, as to divide one of them, fince by that Means any Silver or Leaden Pipe, whether round or flat, may the more conveniently be inserted into the Wound, for making the Inflation. But before the Surgeon withdraws his Knife a proper Probe is to be introduced by its side, that the Pipe may be afterwards the more easily inserted.

3. Another and more expeditious Method of pening the Trachea is this: A two-edged Knife is applied to the abovementioned Part of the Throat, and cautiously passed thro the Skin, Fat, and Muscles, in the Cavity of the Trachea itself, and a Pipe for making the Inflation forthwith inserted into the Wound in the Manner already directed. This Method is not only more ex-

peditious,

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peditious, but also leaves a less considerable

Cicatrix than the former.

4. The fourth and last Method of per-forming this Operation is by Means of a Trocar, which is to be so applied to the Middle of the Trachea, as that it may at one Thrust be passed thro' the Skin, Fat, and Muscles, into its very Cavity, and having drawn out the perforating Part, let the Pipe remain in order to make the Inflation. This Method was invented by Fredericus Dieker, sometime Professor of Physick at Leyden, who has described it in his Exercit. Pract. This Method of performing the Operation seems in one Respect to have one Advantage of all the rest, which is, that it is soon over; and the Pipe at the same Time introduced into the Wound with far greater Eafe, and with much less Pain to the Patient, if he has still any Life in him. But even when the Operation is performed in this Manner, great Caution and Circumspection are necessary,

After the Operation is performed in any of these Manners, the Wound is to be healed by keeping its Lips in Contact by Means of adhesive Plaisters, and the Application of proper Compress and Bandage, It is afterwards to be carefully conglutinated by the vulnerary Ballams proper in other Wounds of the Aspera Arteria. Some, in order to induce a more speedy and seemly

Cicatrix

Cicatrix, recommend the Method of Conglutination by Suture, as in the Cure of the Hare-Lip by passing Needles thro' the Lips of the Wound: But it is no doubt highly improper to follow a Practice, which is attended with immense Pain to the Patient, when at the same Time a Method, which is not only far milder, but also equally safe and secure, may be fallen upon.

FINIS.

